Lectures
ON
MOLECULAR PHYSIOLOGY, PATHOLOGY, AND THERAPEUTICS,
AND THEIR
APPLICATION TO THE TREATMENT OF DISEASE.

BY
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LECTURE I.

INTRODUCTION.

It has been a favourite speculation with philosophers in all ages that the infinite variety of matter we see around us is merely the result of a definite combination of atoms. The hypothetical doctrines of Democritus, Anaxagoras, and Empedocles appear, after many centuries of discussion, to have converged into a fixed law about fifty years ago, which was formularized by Dalton under the denomination of the Atomic theory. This theory has unquestionably given a great impulse to chemical science, but has done little for the science of organization. It has facilitated the calculation, and thrown light on the proportional combinations of chemical elements, but has taught us nothing whatever as to the development and growth of plants and animals. The cell doctrine of Schleiden and Schwann, which during the last twenty years has so much advanced our knowledge of the biological sciences, has yet led many minds to the conviction that it cannot embrace all the facts of organization. Hence it appears to me evident, that with a view of making further progress, and stimulating to fresh investigation, we must substitute for the hypothetical atoms of the chemist, the visible molecules of the histologist, and demonstrate how all research and discovery in recent times tend to support a molecular rather than a cell theory of organization. It will be my object, therefore, in this and the following lectures to develop what I consider to be the true law of organic formation; to blend the well-known cell doctrine of Schleiden and Schwann into a theory of wider application; to show how the known facts in physiology and pathology give it the most unequivocal support; and lastly, indicate the manner in which it must constitute the basis of a sound therapeutics.

THE MOLECULAR ELEMENTS OF THE TISSUES.

Definition.—By a *molecule* is to be understood a minute body, seen under high magnifying powers in all organic fluids and textures, varying in size from the four thousandth of an inch down to a scarcely visible point, which may be calculated at less than the twenty thousandth of an inch in diameter. Optically it is distinguished according to its size; the smallest presenting dark or light points as the focus is changed, and the larger exhibiting a dark or light centre, surrounded by a distinctly shadowed ring. These last are frequently distinguished by the name of *granules*. The ultimate molecule has never been reached, even with the highest magnifying powers. In the same manner that the astronomer with his telescope resolves nebulæ into clusters of stars, and sees other nebulæ beyond them, so the histologist with his microscope magnifies molecules into granules, and sees further molecules come into view.

The chemical composition of molecules must vary infinitely, but I have been in the habit of classifying them into three groups, and referring them to—1st, the albuminous; 2nd, the fatty; 3rd, the mineral compounds. These component constituents may be mingled together in various proportions, so as to produce simple and compound molecules. In the vast majority of cases they are globular in shape, but they may be angular, square, and of various forms. They may differ in size, or be of tolerably uniform size in the same liquid or substance. They may be regularly or irregularly diffused in the matter examined. Sometimes they are concentrated in particular places, and at others scattered in groups. Their colour is various. Most of the pigments in plants and animals are dependent on the formation of molecules, which in the human lung have been proved to be pure carbon; and in the tissues of plants and animals, differently tinted kinds of fat or of wax.

FIG. 1. FIG. 2. FIG. 3. FIG. 4.

Various kinds of molecules. Fig. 1. Minute histogenetic molecules. Fig. 2. Molecules varying in size. Fig. 3. Molecules aggregating together. Fig. 4. Histolytic molecules mingled with *débris* of tissue. (Magnified 250 diameters linear.)

Development of molecules.—Molecules may be formed in two different ways—1st, by precipitation in fluids or semi-solid substances; 2nd, by the disintegration of previously formed tissues. The former may be called *histogenetic* (ἱστος and γενος), and the latter *histolytic* (ἱστος and λυσις—dissolutio)—a term first proposed by Dr. Lyons, of Dublin. They may be denominated molecules of formation and molecules of disintegration.

Histogenetic molecules are formed either from the union of two simple organic fluids, or from precipitation occurring in formative fluids holding various substances in solution. It was Dr. Ascherson, of Berlin, who first discovered the important fact that the mere contact of oil and fluid albumen caused the latter to coagulate in the form of a membrane, which he called the haptogen membrane, from ἁπτομαι, to come in contact. A more complete mixture of two such drops produces, as is well known, a white opaque fluid or emulsion, which structurally exactly resembles milk—that is to say, it consists of molecules composed of a drop of oil surrounded by a layer or membrane of coagulated albumen. Such compound molecules possessing the property of endosmose may therefore readily be produced artificially, and by trituration can be reduced in size, so as to resemble the elementary molecules in chyle or in the yolk of the egg. If oil and albumen be introduced into the stomach and intestinal canal, they are always so reduced; and one of the objects of digestion would appear to be, separating from the food and rendering fluid its oil and albumen, so as to produce the chyle molecules, which are ultimately transformed into blood. Indeed, everywhere in living organisms it may be observed that oil and albumen, formed as secretions by plants, and entering the bodies of animals as food, either separately or united, constitute the chief origin of molecular formations.

Mr. Rainey has recently pointed out the condition which causes molecular mineral matter to assume the form of rounded nuclear bodies.* This condition is viscosity. If carbonate of lime be dissolved in water, the forms produced on its precipitation are crystalline, but if the fluid be glutinous—composed, for example, of fluid gelatine or gum—the forms produced are oval or globular. Precipitations made in this way on slides of glass closely resemble the appearances called nuclear or cellular in different stages of development, as in Fig. 5. Mr. Rainey has further shown how starch granules are produced in the juices of vegetables, by the endosmose of gum into a cell containing a solution of dextrine.† In the same manner that the contact of oil and albumen produces oleo-albuminous molecules, so does the contact of gum and dextrine precipitate starch molecules. In this manner we can comprehend how the mixture of various organic fluids gives rise to particles of different kinds.

* On the Mode of Formation of Shells of Animals, of Bone, and of several other Structures, by a process of Molecular Coalescence, &c. By Geo. Rainey, M.B.C.S. London, 1858.

† Microscopical Journal, 1858.

FIG. 5. FIG. 6. FIG. 7.

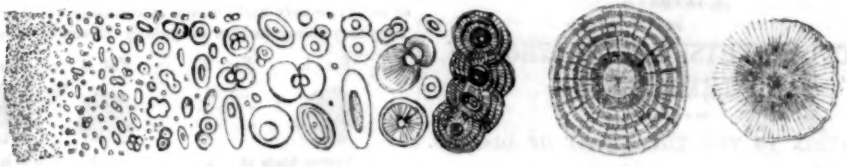


Fig. 5. Mineral molecules coalescing into nuclear and cell forms, with single and double nuclei, as seen in the preparations made according to Mr. Rainey's process. Fig. 6. A large calcareous concretion formed in the same manner. Fig. 7. A concretion in the act of disintegrating. (Rainey.) 250 diameters linear.

Histolytic molecules are the result of the transformation and disintegration of fluid and solid substances by chemical or mechanical action. They are often larger in size than histogenetic molecules, are more purely fatty, and from being sometimes associated with the *débris* of broken-down texture, may, in such cases, be readily distinguished. Thus, in the breaking up of cells or of muscle when they become fatty, or in the putrefaction of animal or vegetable matters, these may be seen to soften, lose their peculiar structure, break up and ultimately be reduced to a molecular condition.

We shall subsequently see that these two kinds of molecules are constantly changing places; or, in other words, molecular matter formed from the process of disintegration, may, when placed under peculiar circumstances, become the basis of matter which undergoes development. In nature, the breaking down of one substance is the necessary step to the formation of another, and the histolytic or disintegrative molecules of one period become the hystogenetic or formative molecules of another. This fact constitutes the basis of the law which I shall subsequently seek to establish.

Molecular movements.—These molecules are governed by forces, which induce among them a variety of movements, and cause them to combine in definite ways. This force, which we may call *molecular force*, is altogether independent of cell nucleus, or other form of structure.

1st. I need only allude to the well-known molecular movements described by Robert Brown. These vibratile, circular, serpentine, or irregular motions may be observed whenever molecules are suspended in fluids of certain densities, but are too well known to require notice here. They occur altogether independent of organized structures, and must be regarded as in their nature purely physical.

2nd. The peculiar movements observed in the interior of cells, vegetable or animal, and during the putrefaction of organic matter. Amongst these I may refer to those seen in the large vegetable cells of the Chara, Vallisneria, and Tradescantia amongst plants, and those of chyle, the yolk of the egg, and of the salivary cell amongst animals. Again, I have frequently watched the formation of vibriones in putrid fluids. A scum, composed of molecules, collects on the surface; gradually several of them unite in minute filaments more or less long, which assume vibratile or serpentine movements. It has been much disputed whether this class of molecular motions be physical or vital.

3rd. The movements, which are unquestionably vital, that occur in the molecules of the yelk, on the entrance into the ovum of the spermatozoid. Here it cannot be maintained that the results are purely physical, because in different ova we see such widely varying effects from apparently the same cause. Neither can it be attributed to any direct influence of the cell or of its nucleus, the germinal vesicle. For example, an egg is fully maturated in the female organs of generation, and would prove abortive if a spermatozoid did not find its way through the zona-pellucida, and get amongst the molecules of the yelk. As soon as it does so, the apparently purposeless Brunonian movements receive a new impulse and direction. Both spermatozoid and germinal vesicle are dissolved among them, and that wonderful phenomenon of the division of the yelk takes place, not by cleavage or other action of the cell-wall or nucleus, but by the separation of the mass into two masses instead of one. The nature of the phenomenon in this case may be compared to what is observable in a dense crowd of men called upon to pass over to the right or left hand in order to settle any disputed question by a majority. At first unusual confusion is communicated to the whole; some hurry in one direction, others in another; but after a time there is seen at the margins, where the crowd is least dense, a clear space, which gradually approaches the centre, and at length, bisecting the whole, produces a complete segregation of the crowd into two portions. So with the molecules of the yelk in the egg after impregnation: their movements are directed by conditions which did not previously exist, and a stimulus is imparted to them which causes the peculiar result. It is the division and sub-division of the yelk, wholly or in part, which produce the germinal mass out of which the embryo is formed, and this not by any direct influence of the cell or nucleus, but in consequence of a power inherent in the molecules themselves, which was communicated to them for a specific purpose.

4th. The peculiar movements so well described by Brücke, Von Wittich, Harless, and especially by Mr. Lister, in the pigment cells of the frog's skin,* and which occasion the sudden change of colour in the chameleon, in fishes, and numerous other animals. The black pigment molecules may be diffused throughout the cell or concentrated in a mass, and all kinds of intermediate gradations may exist between diffusion and concentration. The change in colour is owing to these alterations in the molecules, the tint being light when they are concentrated, and dark when they are diffused. Mr. Lister ascertained by experiment that their concentration is caused by exposure to light, by death of the animal, and by sudden section of the nerve going to the skin; while darkness and irritation of the nerve or skin cause diffusion. Sudden amputation of a limb produced at first diffusion, followed by the concentration of death. These movements of the pigment molecules are peculiarly vital, and altogether independent of the cell-wall or nucleus. The former is stationary, and acts only as a sac or investing membrane around the moving particles, while the concentration of them about the nucleus is purely accidental, and frequently occurs in other parts of the cell. I have seen these molecules myself, as Mr. Lister describes them, streaming out to and returning from the circumference under the influence of the stimuli referred to, where no cell nor nuclear action could be thought of.

5th. There are many other kinds of movements which are evidently unconnected with cells: for example, the contractile fibrillæ of muscle are not dependent for their inherent power on cells or other form of structure, but on the square-shaped molecules of which its substance is composed. All these phenomena therefore are connected with the molecules themselves; the force occasioning them is a molecular force, and has nothing to do with pre-existing cells, or supposed germinal centres, as some have imagined.

The power of combination between these molecules, which, under peculiar conditions, not only move, but so move as to advance towards and press upon each other that they at length unite and produce higher forms, must also be attributed to a molecular force operating in obedience to fixed laws. Thus it was demonstrated by Newton, that in a sphere the total attraction resulting from the particular attraction of all its component parts, is, as regards any body drawn towards it, the same as if they had been concentrated at the centre. Hence minute spherical particles, as so many gravitating points, will

* On the Cutaneous Pigmentary System of the Frog. Philosophical Transactions, 1858.

be drawn towards each other with a force varying inversely as the squares of the distances between their respective centres. I refer you to the able descriptions and researches of Mr. Rainey* as to the physical laws regulating the formation and disintegration of bodies by molecular attraction and repulsion, as well as by molecular superposition; showing that the same physical power which leads to the formation of these artificial bodies, when long continued, causes their disintegration and destruction. The contemplation of these changes, when regarded as purely physical phenomena, must strike us with surprise as being closely allied to all our conceptions of the progress of life itself.

Mr. Bridgman, of Norwich, has lately shown that bodies produced slowly by Mr. Rainey's process may be formed in a few hours by inserting into viscous solutions of carbonate of lime the two wires of a galvanic battery; and he further concludes from experiments, that molecular precipitation is influenced by electrical currents, so that if a tissue be in a negative state it grows, and if in a positive state it disintegrates. "To set up absorption, therefore," he says, "it is only necessary to induce an electro-positive condition of a part." Further, he has succeeded in forming artificial cartilage and bone by placing dentine in albumen or white of egg, and inserting the wires of a galvanic battery. He says: "Around the negative pole will be found a large mass of brilliantly clear and transparent jelly. This substance, although it has been formed out of albumen only, is entirely altered in its character. It is no longer, like albumen, soluble in cold water, or coagulable by heat. It has become identical with the material of basement membrane and bone cartilage.....The portion formed at right angles to the two poles is of this character in its densest state, almost, if not quite, equalling the densest cartilage. An examination by the microscope shows that it is also in some parts thickly studded with peculiar globular crystals of lime, closely resembling those figured by Mr. Rainey. It is thus, in its composition, strictly analogous to bone in the early stage of its calcification."†

I have examined some of Mr. Bridgman's preparations, and can confirm the accuracy of his descriptions. After the lecture I shall show you a section of a young horse's tooth, in which these nucleated bodies may be seen at the margin of the crusta petrosa, uniting with its substance to form bone. When, moreover, we compare the concentric rings and lamina surrounding the Haversian canals, with the like arrangement existing in calculi and all concretions, there can be little doubt that the mineral deposits in bone are intimately connected with the molecular law of aggregation, rather than with the supposed influence of cells. I have long been acquainted with the fact, that the pellicle which forms on the surface of lime-water presents the appearance represented in Fig. 8, and closely resembles pavement epithelium. It is evidently caused by the nucleated calcareous concretions becoming flattened, and adhering at their edges, in the same manner that epidermic cells do.

FIG. 8.

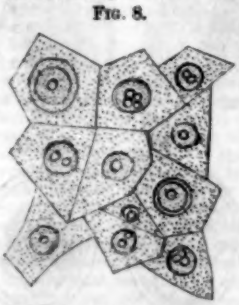


Fig. 8. Calcareous film found on the surface of lime-water, resembling epidermis. (250 diam.)

We see molecules, therefore, combining in the forms of crystals and nucleated spherules, and inasmuch as we have discovered the physical conditions on which they depend, and can produce them artificially, we have no difficulty in classifying these among purely physical phenomena, even when they occur in the interior of animals. But when other molecules unite to form nuclei, cells, and fibres, and these arrange themselves into tissues and organs to produce plants and animals, we are ignorant of the conditions by which these results are brought about; we cannot imitate them artificially, and we are content to call them vital. That is to say, that certain actions are directed and formed by conditions which are as yet undetermined, but which, as they only occur in organic as distinguished from inorganic bodies, constitute vital activity. Not that an organized body is independent of physical forces, but that certain directions are communicated to them which, as invariably resulting in specific forms or properties, make up the sum of what we call vitality.

* Op. cit.; see also papers in the Microscopical Journal.
† On the Absorption of Bone and Dentine, p. 11.

The molecular law of organization.—In endeavouring further to determine the nature of the actions impressed upon molecular matter, I have been led to the following law or generalization—namely, THAT THE DEVELOPMENT AND GROWTH OF ORGANIC TISSUES ARE OWING TO THE SUCCESSIVE FORMATION OF HISTOGENETIC AND HISTOLYTIC MOLECULES. We have already seen that development and growth in animals originate in the molecules of the yelk of the egg, or of a germinal molecular mass formed from it. From the researches of numerous embryologists it would appear that the first form was molecular; that the molecules united to produce nuclei and cells; that these became disintegrated to produce a secondary mass of molecules; that these again united to form secondary nuclei and cells, and that the same process was repeated more or less often in various developments until the animal or tissue was formed. This constituted the successive histogenetic and histolytic molecules observable in the process of growth—the former building up to a certain extent, and the product disintegrating to produce the latter, which after a time again rearranged itself and became histogenetic to form cells or tissues, which in their turn broke down and became histolytic. In short, it would be found that not only development, but that growth and secretion, absorption and excretion, were only different names given to histogenetic and histolytic processes, and that these were brought about by the formative and disintegrative processes. Numerous illustrations of this law will be subsequently given. In the meantime I shall content myself with describing the changes which occur in the development of Ascaryx mystax, as observed by Nelson. (See Figs. 9 to 33, page 4.)

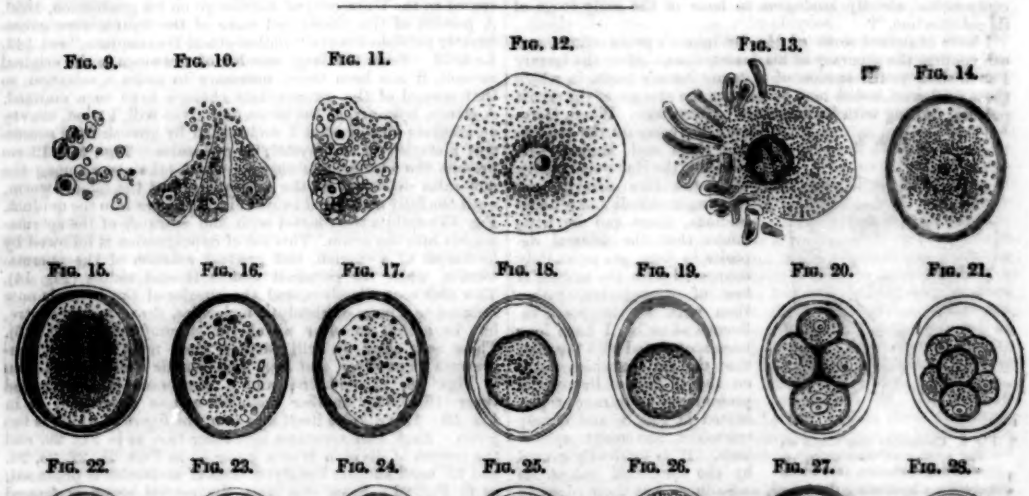
In order to explain the behaviour of molecules during reproduction, I have thought it best to follow the observations of an independent accurate observer. The accompanying figures, therefore, are copied from the original drawings of Dr. Nelson, contained in his prize thesis, "On the Development of Entozoa," presented to the University of Edinburgh on his graduation, 1850. A portion of this thesis and some of the figures were subsequently published in the "Philosophical Transactions," vol. 142, for 1852. From the large number of drawings in the original memoir, it has been found necessary to make a selection, so that several of the intermediate changes have been omitted. A glance, however, at the series now given will, I trust, convey an accurate idea of what I understand by growth from successive histogenetic and hystolytic molecules. Figs. 9 to 12 represent the histogenetic changes which take place among the molecules deposited in the ovarian tube of the female worm, until the fully maturated ovum (Fig. 12) passes into the oviduct. Fig. 13 exhibits the contact with and entrance of the spermatozoids into the ovum. This act of impregnation is followed by formation of a chorion, and gradual solution of the spermatozoids, while the germinal vesicle is still visible (Fig. 14). This also soon dissolves, and the interior of the ovum is now reduced to a mass of histolytic molecules, dense in the centre, but beginning to clear up at the circumference (Fig. 15). These now clear up still further, then meet together, concentrate themselves, and form histogenetic molecules, as seen in Figs. 16, 17, and 18; and a membrane forming round them, (Fig. 17,) another included cell is developed, as in Fig. 19. This divides itself into two, the figure of which is not given. Each half separates into other two, as in Fig. 20, and the process of division is seen going on in Figs. 21, 22, 23, 24, and 25, until another histolytic mass of molecules is produced, as in Fig. 26. From this mass the perfect worm is formed directly by simple coalescence of the molecules, which again become histogenetic. They unite together, concentrate themselves, and separate from the vitelline membrane, Fig. 27. A cup-shaped depression then occurs (Fig. 28), which, passing through the mass, forms a ring (Fig. 29) that is seen to be divided at one place. The two ends of the ring now elongate and cross one another (Fig. 30), and the molecules go on coalescing to form the body of the worm. This next becomes spiral, as in Figs. 24 and 25, and on the breaking of the vitelline wall is extruded as the perfect animal (Fig. 33). During this process the molecules of the ovary first coalesce to form the ovum. After fecundation the spermatozoids and germinal vesicle disintegrate and form histolytic molecules. These re-arrange themselves to produce an included cell, which, constantly dividing, is once more reduced to a mass of histolytic molecules. These by a third act of histogenetic coalescence produce the perfect animal.

In this and a vast number of similar observations it must be evident that a certain series of molecular transformations is necessary for the one which follows it. Thereby is produced a continual elaboration of matter—a constant chemical and mor-

phological series of changes, the exact number and order of which in the production of organic forms only require time and perseverance to discover. Doubtless various conditions, dynamical, chemical, and vital, must co-operate in producing the result, and they must all influence molecular as well as every other kind of combination. Such considerations and facts must convince us of the error of endeavouring to place the source of special vital action in any particular form or arrangement of organic matter, whether fibre, cell, nucleus, or molecule. Each and all of these elements have their vital endowments, which re-operate on the others; but inasmuch as the molecular element is the first as well as the last form which organized matter assumes, it must constitute the principal foundation of organization itself.

From what has been said, it will be apparent that it has not been my object, in directing attention to a molecular theory of organization, to interfere in any way with the well-observed facts on which physiologists have based what has been called the cell theory of growth. True, this last will require modification in so far as unknown processes of growth have been hypothetically ascribed to the direct metamorphosis of cell elements. But a cell, once formed, may produce other cells by buds, by division, or by proliferation, without a new act of generation, in the same manner as many plants and animals do, and this fact comprehends most of the admitted observations having reference to the cell doctrine. The molecular, therefore, is in no way opposed to a true cell theory of growth, but constitutes a wider generalization, and a broader basis for its operations. Neither does it give any countenance to the doctrine of equivocal or spontaneous generation. It is not a fortuitous concourse of molecules that can give rise to a plant or animal, but only such a molecular mass as descends from parent, and receives the appropriate stimulus to act in certain directions.

Practical applications.—The molecular theory must ultimately constitute the basis for the arts of horticulture, agriculture, and medicine. Thus vegetables and animals grow by the juxtaposition of molecules which are introduced into the economy in the fluid form. This fluid holds in solution the particles of which the different textures consist. These are deposited, and so increase of bulk takes place. Any interruption to this process, or any violent disturbance in their statical, chemical, or dynamical arrangements when formed, is the fruitful cause of disease. If this occurs in nervous matter, it causes pain, convulsions, and spasms; if in muscle, paralysis; if in the blood, alterations in growth, secretion, excretion, &c. In cases of faulty nutrition, it is reasonable to conclude that if we could add to, or subtract from, the particular molecular elements which are essential to that process, we could accelerate or retard it: and this is within the reach of the medical practitioner. For example, cod-liver oil in scrofulous and phthisical cases operates, not because of any vague specific virtue it has been supposed to possess, but on account of its power of adding to the molecular constitution of the chyle, and thus favouring the building-up function of the blood and tissues. There can be no doubt that iron, lead, opium, strychnine, and other of our remedial agents, must operate on this or that tissue in virtue of the affinities between them and the ultimate molecules of such textures. Again, the law of successive molecular evolutions and disintegrations, to which I have directed your attention, points out that in the chain of processes each step is dependent on the one that precedes it; and that inasmuch as regards form we cannot go farther back than the molecular form, so a knowledge of it and the manner in which it is produced from fluids holding proximate principles in solution is not only the first step to an acquaintance with organization, but is the one which should best inform us how to repair that organization when so altered as to constitute disease.



Figs. 9 to 33. Development of Ascaris Mystax, traced from the molecules formed in the ovary up to the production of the perfect worm. (Nelson.) Figs. 9 to 11 magnified 330 diameters; the rest 220 diameters linear.

Lectures
ON
DISEASES OF THE OCULAR APPENDAGES.

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LECTURE III.

ECTROPIUM, OR EVERSION OF THE EYELIDS.

Analogy between ectropium and entropium; various forms—1stly, from muscular spasm; in children; mode of occurrence; treatment—2ndly, from chronic inflammation; lodgment of tears; contraction of skin; hypertrophy of conjunctiva; treatment; mode of remedying each of these conditions; operations to shorten lid and to diminish aperture—3rdly, ectropium from cicatrix; treatment.

WE shall find that this condition bears a close analogy, in the methods by which it is produced, to entropium. Thus there is one form of this affection that is produced by sudden muscular spasm, acting irregularly upon a swollen lid, and revolving it upon its axis; and another forming gradually, and differing materially in degree, the result of some cutaneous contraction. The former of these conditions occurs most commonly in children, and almost invariably affects the upper lid. It takes place when the conjunctiva is swollen by purulent or severe catarrhal ophthalmia. If this happen to occur unduly at the lower tarsal border, the fibres of the orbicularis muscle corresponding to the upper border are thrown into undue action, which still further increases the swelling until, by a sudden spasm, it everts the lid, and then by its contraction keeps it so, and still further constricts it—resembling, in fact, a case of paraphimosis; or it may sometimes happen that in cleansing the eye, or in applying a lotion, the lid becomes accidentally everted, and then the combined action of the muscle and of the swollen membrane keeps it in its abnormal condition. If this condition is seen at an early period by the surgeon, it is easily and permanently remedied. The swelling may be relieved by freely scarifying or by applying some strong astringent. The lid must then be mechanically reduced to its natural position, and retained there by keeping up gentle pressure. This may be done by a piece of sponge or lint fixed on with plaster, or by the direct application of the plaster to the lid, so as if possible to prevent its eversion. It is important that, if it does become again displaced, it should not be allowed to remain so, but be reduced again as soon as possible. I have occasionally met with cases in which this condition has been allowed to remain unrelieved for a considerable period, and in which the parts implicated have become strongly disposed to maintain their abnormal state. This condition I have found very embarrassing, and not responsive to ordinary treatment. Even when carefully replaced, it speedily relapses into its former state.

A very severe case of this kind recently came under my notice at this hospital, in which this form of ectropium had remained unrelieved for several months. All ordinary means of retaining it in position failed. I then passed a silk through the cartilage, and carried it on through the lid, so as to tie the one to the other. This answered so long as the suture held; but when it cut itself through, the lid returned to its false position. I then removed a considerable portion of the swollen conjunctiva; this succeeded, but has produced some puckering up of the lid.

If a similar case came under my care now, I should try a different plan. I should remove a small portion of the skin of the upper eyelid at a spot corresponding to the upper border of the tarsal cartilage, also the muscle in the same situation, and then with sutures unite the conjunctiva corresponding to the upper border of the cartilage to the wound—performing, in fact, the exact counterpart of the operation performed so successfully upon the lower lid for muscular entropium.

Again, ectropium sometimes results from chronic inflammation of the lid, causing congestion and hypertrophy of the conjunctiva lining it, and ulceration and contraction of the skin covering its surface. The combined action of these two causes serves to separate the lid from the eye, and to form a fossa below the level of the punctum for the lodgment of tears, which, in their turn, react and keep up the irritation. The eye is thus deprived of its natural protection. The conjunctiva palpebræ is exposed and annoyed. In old people, this is further aggravated by laxity of the muscle, favouring eversion of the lid.

Thus we see the eversion is caused partly by the swelling of the conjunctiva, partly by the contraction of the skin, and partly by the looseness of the parts. It is chiefly found in the lower lid, and it varies much in degree and in the proportion in which these different causes operate in bringing about this result. The deformity resulting from such a condition, and the constant discomfort from which the patient suffers, induce him to seek anxiously for some relief, and to submit to almost any method of treatment for this purpose.

Owing to the variety of causes in operation, the treatment is somewhat complicated and embarrassing, tedious and unsatisfactory. We must endeavour to remove *seriatim* the different causes of this affection. The tear course must be restored in a way that I shall have to describe when I come to that subject. This constitutes a most important part of the treatment. No healthy action can be restored to the part so long as it is kept constantly wet and excoriated by the accumulated tears.

The next point is to endeavour to restore the mucous lining of the lid to its natural condition and position. For this purpose all that part which protrudes and presents forwards may be freely treated with the solid nitrate of silver, care being taken not to touch the ocular conjunctiva. Immediately after the application a stream of water should be allowed to flow over the surface. This may be repeated at intervals until the protruded portion is reduced. If, when this is accomplished, there still remain some separation of the lid from the globe of the eye, this can be removed by excising a V-shaped portion of the lid, and bringing the edges together with a fine hair-lip pin. The effect of this is to shorten the lid and bring it into contact with the eye. It generally unites very accurately, and without any scar, and the only remaining defect is, that the lid occupies rather a lower level than before, or than the other eye.

Another method of accomplishing the same object, and that seems better suited for some cases, is to diminish the palpebral aperture. This may be done by paring the edges of the lids at the outer caruncle, and uniting them. The extent of the paring must be regulated by the extent of the ectropium, by the laxity of the lids, and by the size of the palpebral aperture. In old people, where these conditions exist to a considerable extent, this method produces a better result than the removal of the V from the lower lid. I recently employed this method in the case of a young lady suffering from paralysis of the seventh pair. The balance between the levator palpebræ and the orbicularis palpebrum was lost, and the lids remained permanently open, and to such an extent that the globe of the eye was exposed more than the other eye, producing a very ugly stare. The effect was very satisfactory: the aperture was reduced to the average of the other eye, entirely removing the deformity, and facilitating the protection of the organ during sleep. The condition I am now describing is usually found in the lower lid only. Any approach to the same state in the upper is much more readily set right.

The third form of ectropium to which I would direct your attention is the most severe and the most difficult to manage. It may occur in either lid or both, and results from the contraction of a cicatrix. This cicatrix may be caused by a wound, an ulcer, an abscess, or a burn. It is more frequent in the lower than in the upper lid, and varies very much in degree. It sometimes produces very unsightly deformities, and exerts an injurious influence upon the eye in consequence of the unprotected state in which that organ is left. When the upper lid is implicated, the patient learns, during sleep, and when making the effort to close the eye, to roll it up under the lid, so as from time to time to sweep its surface, and protect it; and I once saw a case in which the upper lid was so entirely drawn away from the eye, that, all shelter from it being impossible, the eye had learnt to roll down behind the lower lid. One of the most common causes of this form of ectropium in the lower lid is a strumous abscess of the lower and outer margin of the orbit, producing a slight exfoliation, and adhesion of the contracted skin to the margin of the orbit, by which the outer part of the lower lid is drawn down. Some of the most severe forms of ectropium result from ulceration and from burns: the deformity is sometimes very great in such cases.

Every shade of variety and extent of displacement is found, but they for the most part have these two points in common: first, they exhibit evidence of the destruction of a certain amount of skin; and secondly, they are attended with elongation of the tarsal cartilage. Both these conditions, as I have

already said, vary very much in degree; but they both exist, more or less. Every plan of treatment, therefore, that offers any fair prospect of success, must have for its object the removal of these two conditions. Much ingenuity has been exerted upon these cases. Thus it has been suggested to divide the cicatrix freely, and then, by keeping the edges apart and drawing up the lid, endeavour to prevent subsequent contraction. This produces temporary improvement, but, sooner or later, it invariably returns to its former condition, and even to a state worse than before. The problem we have to work out in such a case is, how to obtain the requisite amount of skin from the neighbouring parts with the least degree of deformity, and at the same time to reduce the lid to its normal length and bring it into contact with the globe of the eye.

In slight cases, particularly in the upper lid, an operation has been recently performed by Mr. Wordsworth which very much improved the condition of the parts. A fine sharp-pointed knife was carried under the lid, and passed on between the bone and the soft parts to the extent of from half to three-quarters of an inch, so as freely to separate this part of the scalp from the bone. A compress was then applied upon the forehead in such a way as to force down the soft parts, and with them the everted and raised lid, and thus force them to form a fresh union to the bone lower down. This is, in fact, tantamount to borrowing skin from the forehead. In two cases in which I have seen this plan adopted the result was satisfactory. It has the merits that no scar is made and that it is easy of performance, but it is only suitable for mild cases; the objections are that the eyebrow is depressed, and that it has a slight tendency to relapse.

In more severe cases some other plan must be contrived. Each case must be taken upon its own separate merits; each step that is taken must be well considered and carefully carried out, and its probable effects anticipated before it is undertaken; and nothing should be done that does not offer a fair prospect of considerable improvement. It only comes within the scope of a lecture like this to indicate a few starting-points to guide you in such cases; the rest must be left to be worked out by each individual surgeon in accordance with the peculiarities of the case. Where a strumous abscess has existed, attended with exfoliation of the bone, and adhesion of the cicatrix to the bone, all we can do is to substitute one point of adhesion for another. A V-shaped incision must be made, so as to include the cicatrix and adhesion, and to extend some way beyond; this must be raised and detached from the bone, so as completely to free the lid from its attachment, and allow it to resume its normal place; the flap must then be allowed to fall loosely upon the surface thus denuded, and the gap that is left below must be closed by bringing the edges together with pins, thus converting the V into a Y, and borrowing in this indirect way the skin that is required. Simultaneously with this proceeding, a triangular piece must be removed from the elongated lid, so as to effect the twofold object of reducing the lid to its proper length, and raising it up to its proper place. I have performed this operation on two or three occasions, with a very good result. The same plan is applicable to ectropium of the upper lid, and skin may be borrowed from the forehead to almost any extent by converting a long V into a Y; but much judgment is required in doing this, so as to allow on the one hand for subsequent retraction, and on the other not to lower the lid beyond a certain point, since the action of the "levator palpebræ" is much impaired, if not totally destroyed. In those very sad cases in which the lid is quite destroyed, the only chance is to transplant a portion of healthy skin so as to supply the place. This plan of operating is only to be resorted to when all chance of benefit from the other plan is given up, and it is only in the hands of very careful and skilful operators that it is likely to succeed; it requires much previous thought, careful mapping out of all the parts, constant attention to every little detail throughout, watchfulness in leaving blood-vessels to nourish the part, accurate adaptation of one surface to the other, &c. But all these remarks apply to plastic operations in general. I must confess that I am not very partial to these operations. The skin that replaces the natural lid is so different in its texture and appearance, and is so apt to contract into a ball in consequence of the contraction of the surface upon which it rests, that it requires all the partiality of a parent for its offspring to contemplate such a result with any complacency. Then there is always a chance of the flap sloughing, and under these circumstances the patient has endured a severe operation not only in vain, but with an accumulation of scars. At the same time, I am ready to admit that I have seen cases in which decided benefit has followed the operation.

DIALYSIS AS APPLIED TO THE DETECTION OF POISONS IN MEDICO-LEGAL CASES.

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THE following experiments were made in the laboratory of St. George's Hospital, to determine the value of dialysis as a method of separating poisons from organic mixtures, and thus rendering their detection a matter of ease to the medical practitioner. The universal interest that Professor Graham's remarkable investigations excited, and the hope that his discovery would prove available in medico-legal cases, made it desirable to ascertain by experiment if such hopes were securely based. Throughout the experiments Professor Graham's instructions were accurately observed. A dialyser formed of a gutta-percha hoop, twelve inches in diameter, upon which well-soaked parchment-paper was stretched (the whole forming an instrument like a tambourine), was floated in a glass basin of water. This water will be spoken of as the diffusate. To test the materials, a few preliminary experiments with coloured fluids were made, with satisfactory results. When the fluid on the dialyser was coloured by a crystalloid, the diffusate received the colouring matter; when a colloid was the colouring agent, the diffusate remained untinged. The decimal weights and measures were used throughout, as most convenient. The gramme is equivalent to 15·432 grains; the litre is equivalent to rather more than 1 pint 15 ounces; the centilitre, to 2 drachms 43 grains.

To avoid repetition, it may be stated at once, that whenever an organic mixture was placed on the dialyser, a little amorphous matter was invariably found, on evaporation, in the diffusate, at the end of twenty-four hours. How far this interfered with the application of the ordinary tests the experiments show.

Experiment 1.—A portion of the stomach of a man known to have been poisoned by opium was cut up, and, with its contents, mixed with water, and placed on the dialyser for twenty-four hours: the outer fluid, or diffusate, was then replaced by fresh water. At the end of the next twenty-four hours each diffusate was tested in the ordinary manner for meconic acid by sesquichloride of iron. No reaction occurred. The diffusates were then evaporated together to the bulk of an ounce: on this fluid being tested as before for meconic acid, a very faint reddish-brown tinge was produced, but not of a sufficiently decided character to enable anyone to swear to the presence of opium.

Experiment 2.—0·200 gramme of powdered opium was digested in water, acidulated with hydrochloric acid, at 32° centigrade, for two hours, and then thrown on the dialyser. In twenty-four hours, the diffusate, without being concentrated, gave ample evidence of meconic acid.

Experiment 3.—One centilitre of laudanum was mixed with three eggs and water, a few drops of hydrochloric acid were added, and the whole thrown on the dialyser. The diffusate was evaporated to a bulk of about two ounces. Evidence of meconic acid was obtained, the reaction being as marked as that produced by fifty drops of laudanum in two ounces of water.

Experiment 4.—A centilitre of laudanum was mixed with three eggs and water, and thrown on the dialyser; no hydrochloric acid had been added. The diffusate, at the end of thirty-six hours, neither before nor after concentration yielded any evidence of meconic acid or morphia.

Experiment 5.—Two centilitres of laudanum were mixed with milk; a little hydrochloric acid was added. In twenty-four hours the diffusate had an opalescent appearance, and was so faintly tinged by the sesquichloride of iron solution that no evidence of meconic acid was obtained. The fluid was concentrated, and became turbid from phosphates. A drop of acid in great measure cleared the fluid. A very faint reaction of meconic acid was obtained.

Experiment 6.—Two centilitres of laudanum were poured down a rabbit's throat. The rabbit died almost instantly.

The stomach with its contents were at once removed, and with acid and water thrown on the dialyser. No evidence of meconic acid could be obtained in the diffusate. It should be mentioned that the stomach had no smell of opium whatever when removed from the animal's body.

Experiment 7.—0·05 gramme of sulphate of strychnine was dissolved in water with a little sulphuric acid, and placed upon the dialyser for twenty-four hours. The faintest purple tint was momentarily produced with the bichromate of potash and sulphuric acid on a drop of the diffusate. A portion of the diffusate was concentrated, which gave more and more marked evidences of strychnine being present as it evaporated. Into the remaining portion of the diffusate, after the free acid had been neutralized, a full-grown frog was placed; at the end of three hours it was seized with tetanic rigors and emprosthotonos—quite characteristic of strychnine-poisoning upon these animals.

Experiment 8.—Six nux-vomica beans were cracked, and for thirty-six hours digested in very dilute sulphuric acid at 30° centigrade. The beans were now quite soft and had partially fallen to pieces, and the acid liquor had assumed a brown tint. All was thrown on the dialyser. At the end of twenty-four hours the diffusate was faintly brown in colour. No purple tint could be perceived until the fluid was concentrated, and the colour then produced was of a very uncertain nature: it was purplish running into pink. Experiments proved that organic fluids containing no strychnine gave an extraordinarily similar reaction with the same reagents. Further evaporation rendered the characteristic colour less distinct, until the fluid itself was a brown syrup totally unfit for any colour test. A few drops were placed under the skin of a frog, which after one or two slight convulsions became apparently comatose, and in twenty minutes died rigid. Another that was treated in the same way, except that the acidity of the syrup was neutralized, exhibited the same signs of torpor for forty-eight hours, when it died. The remaining syrup was diluted with water, neutralized by carbonate of soda, and a frog placed in it. In two hours emprosthotonos and tetanic convulsions came on. The fluid remaining on the dialyser was poured into a beaker and neutralized, and a frog placed in it, which was tetanized like the others in about two hours. One frog died in twelve hours; another was killed; and the third, after remaining on its back in a tetanic condition ten days, recovered. The soft broken beans were rolled up with fat into a bolus and given to a dog, upon whom they had no effect; proving that all the strychnine had been extracted.

Experiment 9.—0·1 gramme of strychnine, dissolved in hydrochloric acid and water, was mixed with three eggs, and thrown on the dialyser. So much organic matter besides strychnine was contained in the diffusate, that neither before nor after concentration could any evidence of strychnine be obtained. The diffusate was evaporated to dryness over water, and the strychnine extracted by ether. The extract after the ether had been driven off gave distinctly the reaction of strychnine.

Experiment 10.—0·070 gramme of sulphate of strychnine was given to a dog. In a quarter of an hour he had tetanic convulsions, and he died in half an hour. The stomach and contents, with acid and water, were thrown on the dialyser. The diffusate on evaporation yielded a purple tint, exactly of the same dubious character as in Experiment 8. It was evaporated over water to dryness; a brown residue resulted: and a small piece of about the size of a pea was placed under the skin of a frog, which in two minutes was seized with violent convulsions, and died.

It did not appear necessary to carry the investigation further with organic poisons. All experiments led to the conclusion that small as was the amount of amorphous matter that passed into the diffusate, it was sufficient always to obscure, and sometimes to prevent, the ordinary chemical reactions, although, as was proved by the frogs in the strychnine experiments, the poisonous crystalloid was present in considerable quantity.

Experiment 11.—A small but unknown quantity of potassio-tartrate of antimony was mixed with three eggs and water, and thrown on the dialyser. In twenty four hours the diffusate, on sulphuretted hydrogen gas being passed into it, became immediately of an orange tint, and soon deposited a yellow precipitate of sulphide of antimony.

Experiment 12.—0·200 gramme of arsenious acid was dissolved in hydrochloric acid, mixed with milk, and thrown on the dialyser for twenty-four hours; the diffusate was then replaced by fresh water, which remained in contact with the membrane forty-eight hours. Each diffusate gave proof of the presence of arsenic, but the second in a fainter degree than the first. All the arsenic was thrown down as tersulphide of arsenic by hydrosulphuric acid. To remove all organic matter, the precipitate was treated with ammonia, and, after filtration, re precipitated by hydrochloric acid. The tersulphide when washed and dried amounted to 0·205 gramme, equivalent to 0·165 of arsenious acid.

Experiment 13.—0·010 gramme of arsenious acid was dissolved in hydrochloric acid mixed with milk, and placed on the dialyser for forty-eight hours. The diffusate was treated exactly as that in the preceding experiment. The tersulphide of arsenic obtained weighed 0·0·9, equivalent to 0·007 of arsenious acid.

Experiment 14.—A little arsenious acid (the quantity not weighed), with a few drops of water, was smeared on a cabbage leaf and given to a young rabbit. After a portion of the leaf had been eaten, the animal became uneasy, and was found the next day dead. The stomach, cut up, and contents, were digested in water at 30° centigrade, acidified with hydrochloric acid for twenty hours, and then thrown on the dialyser. Abundant evidence of the presence of arsenic was obtained in the diffusate without evaporation.

Experiment 15.—A rabbit was given on a cabbage leaf 0·020 gramme of arsenious acid. The stomach and contents, after the animal's death, were treated as before. From the diffusate was obtained 0·010 of tersulphide, equivalent to 0·008 of arsenious acid.

Experiment 16.—Two young rabbits, just purchased, were placed in a hutch which had been occupied some months before by rabbits poisoned by arsenic. Fifteen hours afterwards they were found dead, much of their food being untouched. Their stomachs and contents were treated as usual. The diffusate became of a tawny yellow on addition of sulphuretted hydrogen; and when concentrated a dirty-yellow precipitate resulted. This was separated, treated with ammonia, and filtered; the filtrate, which was yellow, on addition of hydrochloric acid was clouded with a light-yellow flocculent precipitate, soluble in ammonia, so far answering to the reactions of tersulphide of arsenic; but the amount was too small to make it worth while to attempt to obtain a metallic crust by reduction.

Experiment 17.—One gramme of chloride of mercury was digested for four hours with three eggs, hydrochloric acid, and water. The mixture was then put on the dialyser for twenty-four hours. The diffusate was replaced by fresh water, which remained for forty hours. On being concentrated, each diffusate gave strong evidence of mercury, the second containing less than the first.

Experiment 18.—Two dogs were given in meat chloride of mercury (the quantity unknown). They soon vomited up the meat, and continued to vomit mucus and other matter at intervals for some hours. Everything vomited was collected and digested, for forty-eight hours, with hydrochloric acid and water, at 30° cent. The meat had in great measure been dissolved, and the rest was in shreds and pulp, having evidently undergone artificial digestion. The whole was thrown on the dialyser. The diffusate gave strong evidence of mercury, both with the galvanic and chemical tests.

Experiment 19.—To discover if organic matter in any degree interfered with the dialysis of inorganic salts, 0·100 gramme of arsenious, dissolved in hydrochloric acid, was, with water, thrown on the dialyser, and treated as in Experiments 12 and 13. 0·120 gramme of tersulphide, equivalent to 0·96·5 of arsenious acid, was obtained; or 96·5 per cent. of the quantity dialysed. In Experiments 13 and 14, 82·5 and 70 per cent. were respectively obtained.

From these experiments, it appears that metallic poisons are detected far more readily by dialysis than are organic substances; that the presence of colloidal matter does hinder, to some extent, the separation even of the inorganic crystalloids; and that if colloidal matter be placed on a dialyser, a small quantity of it will be found, in twenty-four hours, in the diffusate. Thus, although dialysis may in some medico-legal cases be of assistance to the chemist, it would be dangerous to regard it as a substitute for the old and approved methods of analysis when poison is suspected.

Laboratory, St. George's Hospital, Dec. 1862.

TEMPERATURE OF THE HUMAN BODY AFTER DEATH.

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ON a recent trial for murder, a medical witness gave very positive evidence as to the number of hours that had elapsed since death, grounding his opinion on the fact that the body still felt warm to the hand placed on the abdomen. If I remember well, this gentleman "explained" the high temperature of the abdomen by stating that the woman was pregnant. I think it was a very general impression in the profession that no facts exist on which so confident an opinion could be grounded. Be this, however, as it may, I place the following on record as a contribution to our knowledge on this not unimportant point:—

Private John C——, 22nd Regiment, aged twenty four. He was invalided home from Malta suffering from purpura, which followed an attack of continued fever, probably typhoid, as it was said to have been "complicated with diarrhœa." This young man had a syphilitic history, and his habits were extremely intemperate. He was admitted into the Medical Division of Fort Pitt Hospital on the 19th of October, 1862. He was then much emaciated and very weak, with slight but rather frequent cough without expectoration; the lower extremities and abdomen were covered with purpuric patches; the liver was enlarged, the abdomen tympanitic, with enlargement of superficial abdominal veins, and there was serous effusion into the abdominal cavity.

This man had repeated attacks of epistaxis, requiring the use of the plug in the posterior nares on two occasions, and repeatedly passed blood by stool. Nevertheless, after a time, under careful management, his condition improved, he gained flesh, the bloody discharges ceased, and his general health advanced. Unfortunately, he was seized with double pleurisy, with enormous effusion into the right side, which terminated fatally on the 27th of December, at six A.M. At half-past twelve P.M., Staff Assistant-Surgeon Woods and myself took the temperature of his body, which lay on a grating on the floor of an extremely cold deadhouse, where the body was covered with a sheet, and had remained for six hours and a half after death. The instrument used was a delicate thermometer, made by Negretti and Zambra, for taking the temperature in disease. At the time of the experiment it stood at 52°. Placed in the axilla, it rose to 66°; in the mouth, to 68°. On the chest and abdomen it stood at 65°.

Army Medical School, Fort Pitt, Dec. 1862.

ON A CASE OF POISONING BY A GRAIN OF ACETATE OF MORPHIA IN A CHILD.

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THE following case of recovery in so young a child from the effects of a grain of acetate of morphia taken in a soluble state, and retained undisturbed in the system for two hours and a half, is, perhaps, worthy of record:—

S. L——, aged two years and three months, at nine o'clock on the morning of the 13th of November last, obtained possession of a phial, containing a grain of acetate of morphia in solution in an ounce of oxymel of squills, (a medicine of which her mother was taking a teaspoonful at bedtime,) and swallowed the whole of its contents.

At half-past eleven, when I first saw the child, no vomiting had occurred, although, in addition to the oxymel of squills taken with the poison, she had had, in teaspoonful doses, half an ounce of ipecacuanha wine sent by a chemist, to whom application had been made. I found the child with cold skin, pale face, blue lips, slow weak pulse, and pupils contracted to a point; totally unable to stand, and with difficulty aroused to consciousness enough to express, in childish gestures, its intense desire to be left alone to sleep. Finding that the child still attempted to swallow when a moistened spoon was rubbed against its lips, I administered two grains of sulphate of zinc in some coffee, more with the hope of rousing the child with the effort of vomiting than with the intention of emptying the stomach of the poison, which I believe had been by this time absorbed into the system. In a few minutes the dose was repeated, and on irritating the fauces with the finger, free vomiting was induced. The emetic acted about six times, strong coffee being freely given during each interval.

At half-past twelve the emetic effect of the zinc had ceased, and the child's state had decidedly improved. She swallowed readily, and could stand for a few seconds unaided, though she was with difficulty kept awake by friends and neighbours, who relieved each other every few minutes in leading her about in the open air, and giving her as much strong coffee as she could be got to swallow.

At half-past two the child was brought to my house. She was icy cold, with an almost imperceptible pulse. She soon rallied, however, under the influence of a warm room and a teaspoonful or so of hot wine-and-water, when a great improvement was manifest. The pupils were less contracted, though still immovable. She was less drowsy, and could walk a few steps with a tottering gait. She was ordered to be kept thoroughly awake, and to continue taking coffee.

At half-past eight the effects of the poison were wearing off. The pupils were less contracted, and the irides answered slowly to the stimulus of a lighted candle. She could walk unaided, and had just passed urine for the first time since taking the poison. The stupor had given place to extreme restlessness and irritability of manner, and her teeth were chattering with cold. She took some hot egg and milk, with a little wine, and at nine o'clock (twelve hours after taking the poison) she was allowed to sleep, Mr. Bubb (in my absence) undertaking to see her in an hour's time, and again during the night. Under Mr. Bubb's directions she was allowed to sleep alternate half hours during the night.

At half-past nine, on the 14th, I found her free from any trace of opium poisoning, but in an extreme state of restlessness, bordering on delirium tremens. I got her undressed and placed warmly in bed, (she had been in her clothes in her mother's arms during the night,) and ordered her small doses of chloric ether and ammonia every few hours. After the first dose she fell soundly asleep, and slept all through the day and following night, only being awakened to take her food and medicine; and on the morning of the 15th she woke in her usual health, the bowels acting of their own accord for the first time since taking the poison.

Cheltenham, Dec. 1863.

A Mirror OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

GUY'S HOSPITAL.

FISTULA BETWEEN THE GALL-BLADDER AND COLON; PHTHISIS AND BRIGHT'S DISEASE; DIPHTHERITIC EXUDATION IN THE ILEUM; FATAL RESULT.

(Under the care of Dr. BARLOW.)

OUR present series comprises some rare and strikingly interesting examples of disease in which a portion of the intestinal tube was the subject of a fistulous communication either with some other organ, such as the urinary or gall bladder, or with the external parts; in the latter instance forming a preternatural anus. Unusually dangerous as such solutions of continuity are, not only was life saved in several cases, but a cure of the fistula was effected without any apparent inconvenience to the subject of it. Each case has distinctive peculiarities; but in all peritoneal inflammation was the chief

agent in producing the lesions described, and arising from various causes.

The details of the two following cases were taken from the hospital records in charge of Dr. Wilks:—

Kate G——, aged twenty-six, was admitted into Lydia ward on the 26th of April, 1862. She had had symptoms of phthisis for some time, and subsequently it was found that she had densely albuminous urine. Also, on two or three occasions, she had been seized with violent pain in the right side of the abdomen and fell into a collapsed state, suggesting a perforation of some viscus. It was thought, also, that an obscure tumour could be felt in the right side. It was said that the evacuations for some time were very bilious and highly offensive. She died on June 2nd.

Autopsy, eighteen hours after death.—Both lungs were found filled with tubercle, especially the left, which was in conglomerated, hardened masses. At the apex were one or two small cavities. There was slight effusion of lymph in the peritoneum, as if from the first state of inflammation. The colon was closely adherent to the gall-bladder, and, on attempting to separate them, it was found that the two had communicated. The gall-bladder was of unusual size, and contained a bright-yellow thin fluid. In it was an angular gall-stone, and at the bottom anopening which would admit of a crowquill. The opening into the colon was of the same size. On the mucous membrane this was seen to be evidently of some age; and there was no ulceration whatever around it. At some little distance, however, the mucous membrane was extensively ulcerated. There was one patch below—i. e., in the transverse arch; and above this continued as far as the cæcum. In the latter the disease was acute; but above it was older, and the mucous membrane simply ulcerated. The cæcum was very irregular on its mucous surface, from portions of membrane being ulcerated, and others between them raised; also scattered amongst them were some white spots, about the size of peas; these, when pricked, gave out thick purulent matter as is seen in acute dysentery, and probably were situated in the solitary glands. The last two feet of ileum were covered with a granular layer of lymph, which was with difficulty removed; in some places it was in fine flakes, which might be styled diphtheritic. The spleen was of the usual size, and lardaceous to a high degree. The adventitious matter, however, was still in distinct granules; but more than half the organ was affected. The kidneys were wasted, their surface uneven, white, and speckled with white deposit. The cortical structure everywhere was seen occupied by the same white deposit. This, on examination, was found to be mostly fat.

PASSAGE OF BILE INTO THE PERITONEUM, THE RESULT OF ULCERATION OF THE GALL-DUCT FROM A CALCULUS; DEATH FROM PERITONITIS.

(Under the care of Dr. REES.)

David M——, aged forty-two, was admitted July 18th, 1862, into Stephen ward. He had at this date just arrived from Australia. He was not well at the time of leaving that place, but while on board ship he suffered from severe illness connected with the abdomen, and which was supposed to arise from gall-stones. The exact nature of his complaint was not clear whilst in the hospital, but was believed to be connected with the liver, the skin being yellow, &c. He died on the 29th, eleven days after admission.

Autopsy, fourteen hours after death.—The body was that of a fine man. Peritonitis of some standing was present, there being recent lymph among the coils of intestines; these were also matted together by exudation of an older standing, but by a little force they could all be separated. The liver and spleen were adherent to the diaphragm. There was also a fluid of a bright-yellow colour lying in the hollows of the abdomen, and this appeared to have escaped from under the liver; it had not a fæcal odour; it was found afterwards to be bile, which had exuded from the ulcerated duct at the junction of the cystic with the common duct. The edge of the liver, with the gall-bladder, were firmly united to adjacent parts; but when these were separated, a large gall-stone of the size of a marble was found in the common duct at the entrance of the duodenum. The opening into the latter was large, and the edges of it stood prominently open on the mucous membrane; it, however, was not nearly large enough to admit the calculus itself. The ducts behind were also enlarged, and the same condition existed throughout the liver; they were almost empty of bile, this having emptied itself into the abdomen. The gall-bladder contained another calculus, of the same size, but no fluid with it. At the junction of the bile-duct with the cystic duct was a perforation; around this there was suppuration in the cellular tissue, and the coats of the colon were adherent. There was also suppuration around the gall-bladder itself, so that it was easily removed from the liver. The transverse portion of the colon had slight linear ulceration, with a little exudation on the mucous membrane. Spleen and kidneys were healthy.

ST. BARTHOLOMEW'S HOSPITAL.

FISTULOUS COMMUNICATION BETWEEN THE RECTUM AND BLADDER IN AN INFANT WITH IMPERFORATE ANUS; PASSAGE OF FÆCES THROUGH THE URETHRA; CURE BY OPERATION.

(Under the care of Mr. SAVORY.)

A CONGENITAL communication between the rectum and bladder is a rare circumstance: a case in which it occurred is related by Mr. Masters of Thrapstone, in the *British Medical Journal* of November 29th, 1862; the infant living nine days. As a result of disease, this peculiarity is more often witnessed: a case is recorded in a former "Mirror," under the care of Mr. Canton and Dr. Willshire (THE LANCET, vol. i. 1861, p. 361), and another by Dr. Gibb (idem, p. 384). We add a third, where there is good reason for supposing that the bowel (distended with meconium) opened into the bladder, as there was atresia ani; and notwithstanding the double disadvantage under which the child laboured, it not only lived to reach the age of nine months, but to undergo a curative operation.

An infant, aged between eight and nine months, was admitted on the 14th November, 1862, for congenital absence of the anus, and the passage of its motions by the urethra through a fistulous communication between the rectum and bladder. The child was a puny, delicate, emaciated little creature, with an expression of age and anxiety in its countenance. It was fed exclusively from the breast of the mother, who was a tolerably healthy person. For several days after birth it was very delicate and fretful; the abdomen became considerably swollen and prominent; there was frequent sickness, and vomiting of matters that had, according to the mother's account, a feculent odour; and it was feared the child would not survive. It was, however, soon observed that feculent matter passed by the urethra; all the other symptoms then subsided, and this effort of nature was successful in saving the life of the child. No attempt had been made to obtain advice for the absence of the natural fundamental outlet. The ejecta from the bladder were invariably soft and more or less liquid, from mixture with the urine. This condition, although not accompanied apparently with much irritation, acted powerfully on the constitution of the child, and kept it weak and fretful.

On the 15th, Mr. Savory passed a small sound into the bladder, and by turning the point of it backwards it appeared to enter a cavity that seemed to be the rectum; the end of the instrument could then be readily felt through the integuments of the perineum, seemingly not very far from their surface.

The next day Mr. Savory performed an operation upon the child. Having introduced a small sound, and placed the infant in the lithotomy position, he made an incision in the mesial line of the perineum, about two-thirds of an inch in length, between the scrotum and the coccyx. He then dissected onwards until he reached the staff in a cavity which felt like a very dilated urethra. This he carefully dilated, first with the little finger, until at last it entered a more capacious cavity, in which both staff and finger moved freely. This was a long way from the perineum, and Mr. Savory expressed his astonishment at the distance; and the difficulty was increased by the fact, that owing, as he supposed, to some contraction or want of development of the inferior outlet of the pelvis he could hardly dilate the passage sufficiently to admit the finger. Hence he was obliged to use the smallest finger in the first instance. Nothing more was done, and the child was at once put to the breast. Urine and fæces came freely through the wound.

In the course of a few days, when the wound showed a disposition to contract, an elastic tube, similar to those sometimes employed after lithotomy, was inserted. After passing this occasionally for a day or two, it was retained in the passage by means of elastic bands. All went on well. Urine and fæces passed freely through the wound, and the child gained weight. But in the course of a fortnight an agreeable and surprising change occurred. The fæces still continued to flow freely through the tube; but the urine, unmixed with fæces, found its way by the natural channel, the urethra. So for the present at least Mr. Savory has left the case. The child has returned to the country, where it will be carefully watched.

ST. MARY'S HOSPITAL.

SPONTANEOUS FORMATION OF PRETERNATURAL ANUS ON THE EIGHTH DAY AFTER OPERATION FOR STRANGULATED FEMORAL HERNIA; RECOVERY WITHIN A MONTH.

(Under the care of Mr. URE.)

MRS. S——, aged fifty, a widow, the mother of three children, admitted Dec. 6th, 1860, late at night, with strangulated femoral hernia of the right side. On the 4th current, in consequence of a fright, she slipped down stairs, and presently perceived a swelling in the groin, since which occurrence her bowels were confined; she felt constant sickness, and vomited the simplest food. As far as could be ascertained, the hernia had been strangulated at least thirty hours before she was brought into the hospital. There was a small, tense, oblong tumour, not larger than a nutmeg, situate below the middle of Poupart's ligament. The superincumbent skin was nowise discoloured. The patient complained of pain radiating through the abdomen. The pulse was 108, contracted; the tongue was slightly furred along the centre. The patient having been placed in a warm bath, the taxis was fairly tried, but to no purpose.

At midnight Mr. Ure performed the usual operation, which presented no difficulty. After dividing the skin and cutting through the superficial fascia, he reached the hernial sac, which contained a small knuckle of intestine, apparently of natural colour. He then passed his finger up to the stricture, which he notched in two places with the hernia knife, and carefully returned the protrusion, without opening the sac. The edges of the wound were held together by three points of suture.

Dec. 7th.—Slept well; pulse 100; tongue still furred, but moist; countenance good. She is free from abdominal tenderness, but uneasy from not having voided urine. She has taken some broth, and asks for milk-and-water to relieve thirst.

8th.—Slept well; pulse 90; free alvine discharge after an enema. To allay cough, ordered five grains of compound conium pill thrice a day.

9th.—Pulse 72; no complaint; takes broth with relish.

On the following day the two remaining sutures were removed; the wound looked healthy.

13th (eighth day from operation).—The general health was good, but there was a discharge of brownish liquid from the wound.

15th.—The discharge in question was distinctly feculent; in fact, a preternatural anus had formed. She was now ordered an emollient injection daily, and three grains of compound aloes-and-soap pill every night.

24th.—Profuse feculent discharge from wound, which has notably enlarged, little or nothing being voided by the anus. She complained of want of appetite, for which quina was prescribed; and also of the chafed condition of the skin around the wound, for which a lotion was ordered, composed of dilute lime-water, glycerine, and gum tragacanth.

26th.—The patient has greatly improved within the last two days. There was a free discharge per anum, and but little from the wound, which was evidently closing up; the countenance and appetite had improved; the patient slept well; her pulse was of good strength.

27th.—Preternatural orifice nearly closed; free alvine evacuation from lower bowel; condition in other respects highly satisfactory, with the exception of an erythematous affection of the skin in the fold of the groin surrounding the minute aperture, which occasioned smarting. This was relieved by a liniment consisting of three parts of oxide-of zinc ointment and one part of castor oil.

Within three weeks from the date of the operation the preternatural anus, which at one period seemed rather formidable, had all but healed, as the clothes applied over the spot showed merely a stain. On the 1st of January, 1861, the patient left the hospital cured, after a sojourn of twenty-six days. Mr. Ure had an opportunity of examining the part about a year afterwards, and found that all had remained sound.

Aloes, as is well known, exercises a powerful stimulant action on the colon and rectum. Exhibited in a case like the above, it may be said to renew or quicken, from above downwards, the faltering peristaltic movement, thus favouring the propulsion of the intestinal contents along their proper track, and their final discharge at the natural outlet. Such was the indication sought to be fulfilled, and eventually brought about, in the instance now detailed. Mr. Ure found the above plan of treatment successful in a similar case some time afterwards.

LONDON SURGICAL HOME.

INTESTINAL FISTULA FOLLOWING THE OPERATION OF OVARIOTOMY; SPONTANEOUS CLOSURE; RECOVERY.

(Under the care of Mr. BAKER BROWN.)

A BRIEF record of this case was given in our "Mirror" of December 20th, 1862, as an instance of recovery from ovariotomy. We now notice the case a little more in detail, because a fæcal fistula formed through the abdominal walls:—

M. C——, aged thirty-nine, single, underwent ovariotomy on the 15th of July last. She had been tapped on the 15th of June previous, and ten days afterwards nearly succumbed from a very severe attack of peritonitis. She was more or less conscious during the operation of ovariotomy on account of diseased heart. The ovarian tumour was adherent to the intestines in various directions; and the latter were glued together from old peritonitis. The omentum was wholly adherent. Much bleeding ensued on separating these. The callipers were removed on the 18th, and she went on well till the 22nd, when vomiting came on, which caused the separation of the pedicle from the edges of the wound, and there was an escape of pus and decomposed blood to the extent of a quart from the part which it had occupied. On the 23rd, fæces passed in large quantities from the same opening, and a large piece of sloughy intestine came away. Up to the 30th all the motions passed through the fistula. On that day a warm-water injection thrown up the rectum escaped through the fistula. The next day (Aug. 1st) another injection was given, and brought away feculent matter and flatus by the rectum. Injections were continued daily, with the effect of completely diverting the motions to their natural channel. Nevertheless, a fistula remained for some time, but gradually closing until it spontaneously healed up, and the patient made a good recovery.

Considering the circumstances in the foregoing case, the cure may be looked upon as something remarkable. It well illustrates some of the phenomena which occasionally follow the operation for the extirpation of ovarian disease.

LONDON HOSPITAL.

(MATERNITY DEPARTMENT.)

INDUCTION OF LABOUR AT THE EIGHTH MONTH, AND DELIVERY OF A LIVING CHILD IN LESS THAN FOUR HOURS BY DR. BARNES'S METHOD.

(Under the care of Dr. BARNES.)

THE following case is reported by Dr. W. R. Woodman, acting resident-accoucheur:—

Eliza J——, aged thirty, attended as an out-patient, on account of incessant vomiting, which had persisted from the commencement of her pregnancy till now—the eighth month. The moment food is taken it is rejected. She has rapidly lost flesh, and is now much reduced in strength. She gets no sleep at night from pains in the loins, inside of the thighs, &c. The usual remedies, including the oxalate of cerium, have been tried without avail. She has been married eleven years, and was only pregnant once before—ten years ago. She suffered then from obstinate vomiting, from which she was relieved by abortion occurring about the sixth month. There is no history of cancer in her family. The catamenia appeared at the age of fourteen. She was often irregular, and frequently menstruated bi-monthly. Suffered from hæmoptysis and palpitation before marriage and since; has had rheumatic fever. Four years ago she began to suffer from severe lumbar and pelvic pain, and also menorrhagia; has often lost large quantities of blood; no other discharge; has vomited blood in rather large quantities during this gestation.

Tactile examination reveals a scirrhus-like induration of the cervix uteri, which is nodulated. One very hard nodule, larger than a hazel-nut, occupies the right side of the anterior lip and cervix; there are several smaller ones. The catamenia ceased on the 1st of May last; and as she was so reduced by the vomiting, Dr. Barnes, at her own earnest request, appointed Christmas-eve, at seven P.M., to induce premature labour, remarking at the time that it would not interfere with Christmas-day, as he could promise to terminate the labour in less than eight hours. It was all over in half that time, as the sequel will show.

At fifteen minutes past seven on that evening Dr. Barnes introduced a small caoutchouc dilator into the os uteri by means of the uterine sound. It would then barely admit the

tip of the little finger. In half an hour, by water pressure, two fingers could be admitted, and the vagina was nicely dilated. The stop-cock was then turned off, and the instrument removed for a little while. A rather larger dilator being then introduced, another half hour had enlarged the os uteri to admit nearly three fingers, but dilatation went on very slowly in consequence of the scirrhus-like induration. Dr. Barnes then ruptured the membranes at half-past eight P.M., and incised the os uteri at several points with a guarded penknife. The morbid thickening and rigidity of the cervix were extreme, and would have been incompatible with the birth of a living child at term. Some pains followed, and the dilator was again introduced, and pretty fully distended with water. After about half an hour more the dilator was removed, and opportunity given to allow the induced uterine action to work. A little before ten P.M. the os uteri was sufficiently dilated to allow Dr. Barnes to adapt the long forceps, with which, in another half-hour, he terminated the labour. The face was directed anteriorly. The placenta followed in a few minutes, and the uterus contracted well. The child, a boy of good size for eight months, was born semi-asphyxiated; but after half an hour's use of warm and cold water affusions, and Dr. Silvester's method of artificial respiration, it respired freely. The mother has not had a single bad symptom, and the child, though feeble, bids fair to live. Dr. Barnes hopes that besides relieving the vomiting, (which it has done,) this premature delivery may, by the mammary diversion keeping the uterine and ovarian organs in quiescence, afford opportunity for recruiting the mother's general health.

This case, and others related in Dr. Barnes's Memoirs,* must dispel all doubts—we have heard such expressed—as to the perfection of the new method of inducing premature labour at a predetermined hour, at least in his hands.

We observe that in November last a M. Tarnier read to the Académie de Médecine of Paris a memoir, describing a method of inducing labour by the use of uterine dilators. From the reports in the French journals it does not appear that any reference is made to Dr. Barnes's long prior publications. Although there is every reason to believe that the idea of M. Tarnier's instrument is borrowed from the English obstetrician, he does not appear to have equalled him in the success of his operation. In October last, we are informed, M. Blot, while doing duty at the Clinique d'Accouchements for M. Dubois, using Tarnier's instrument, had not succeeded in completing delivery after two or three days' proceedings. It is clearly desirable to borrow a little further.

CHARING-CROSS HOSPITAL.

FÆCAL FISTULA ABOVE THE UMBILICUS IN A GIRL, FOLLOWING PERITONITIS; SPONTANEOUS CLOSURE.

(Under the care of Dr. WILLSHIRE.)

THE following brief notes were kindly furnished by Dr. Thomas Dobson, of Bowness, Windermere, who was clinical clerk at the time the patient was in the hospital. The case was one of much interest, and the fistulous opening spontaneously healed up.

A female, aged fourteen, of strumous diathesis, was admitted in January, 1861, with the following symptoms:—Pyrexia; pain in the bowels, increased on pressure chiefly around the umbilicus, and attended with some tympanitis; bowels constipated; and the pulse accelerated—in fact, all the symptoms of abdominal inflammation. She was ordered to take calomel and opium every four hours, with an occasional dose of castor oil when the bowels became confined. This treatment was continued for some days. Tenderness and fulness afterwards increased above the umbilicus; she had some shivering fits, and fluctuation became perceptible. It was not thought advisable to open this abscess with the knife; so linseed-meal poultices were ordered to be constantly applied, and she was put upon full diet, and ordered tonics, with syrup of iodide of iron. In a few days the integument gave way, with the escape of pus. This continued for two or three days, when, on removing the poultice one day during the visit to the wards, some feculent matter was discovered on it, not very large in quantity, but with the decided and characteristic odour. This fistula continued to discharge small quantities of fæces for some weeks, when it gradually closed, and the discharge ceased; but it did not remain in this state long before it inflamed, and matter formed, and it discharged again as before. This was repeated two or three times until it finally healed up, and she left the hospital well and cured.

This fistula probably communicated with the transverse colon: 1stly, from its being situated over the course of that part of the bowel—i. e., in the mesial line, and a little above the umbilicus; 2ndly, the discharge had a decided feculent odour, which is supposed to be only acquired in the large intestine.

* Obstetrical Transactions, vol. iii., (April, 1861,) and Edinburgh Medical Journal, July, 1862.

ROYAL INFIRMARY FOR CHILDREN, WATERLOO ROAD.

CHRONIC INDURATION OF THE STERNO-MASTOID MUSCLE IN INFANTS.

(Under the care of Dr. WILKS.)

DR. WILKS states that three cases of this remarkable affection have come before him at the infirmary. He believes that the disease must be familiar to the profession, but he is unable to find any reference to it in books, or to glean from those greatly experienced in children's diseases any information respecting its pathology. The publication of these cases may draw forth the experience of others.

Elizabeth B——, aged seven weeks, was brought to the infirmary April 2nd, 1861, in consequence of the mother having observed a lump on the right side of the neck. On examining the child, a hard, cord-like substance could be felt running in the direction of the sterno-mastoid muscle, its internal edge being very prominent. When the head was bent it was not relaxed, but, being then more easily grasped, it was found to be evidently the muscle which was indurated, for no enlarged glands were present. The child was healthy, and presented no appearance of syphilis. Thinking this might have originated it, some mercury-with-chalk was ordered, and iodide-of-potassium ointment. When the period of giving up the letter had expired (at the end of six weeks) the hardness was fast disappearing.

Jessie D——, aged nine weeks, was brought to the infirmary a few weeks afterwards, the mother having noticed that there had been a hardness on the left side of the neck ever since birth. On examination, there was found to be a hard substance corresponding in position and form to the sterno-mastoid muscle. This had so great a hardness that it felt as if the muscle was changed into tough fibrous tissue, or even into a piece of wood. The child was healthy and well grown, with no history or appearance of syphilis. The previous case having done well, the present was treated in a like manner; and when the child left she was convalescent. It is probable that an equally good result might have come about spontaneously. In this case the mother had observed the induration in the neck immediately after birth, and it must therefore have occurred in utero. It is possible that physician-accoucheurs might show that it had something to do with the position of the fœtus.

The notes of the third case are unfortunately mislaid; but it was that of an infant a few weeks old, who had an exactly similar induration of the sterno-mastoid on the right side. This was fast disappearing when the child was last seen.

WEST LONDON HOSPITAL.

THE VALUE OF THE BROMIDE OF AMMONIUM AS A REMEDIAL AGENT IN CERTAIN DISEASES.

THE physiological effects of the bromide of ammonium formed the subject of a communication, by Dr. Gibb, at the late meeting of the British Association for the Advancement of Science, at Cambridge. They were shown to be such as to demonstrate its value in a number of diseases in which the nervous system is functionally engaged, especially the ganglionic, accompanied by pains of a mild character. The mucous membrane of the entire body is brought more or less under its control, according to the dose and the mode of its administration. In some of the milder forms of skin disease it has also been found to be very serviceable. As an absorbent in glandular and other enlargements, it is not inferior to its sister salt the bromide of potassium, whilst it is superior in some respects in the treatment of some other forms of disease. Dr. Gibb has under his care at the present time, at the above hospital, several cases of epilepsy in which very marked benefit has ensued from its use, in

arresting and diminishing the number of fits; these cases will be given in detail on a future occasion. In mild forms of oophoritis with its attendant symptoms, the bromide of ammonium has sometimes dispelled the latter as if by magic. Trembling, nervousness, and general uneasiness, quickly subside under its use. It acts as an antispasmodic in this respect; for it not only calms irritation, but allays nervous excitability. This has been particularly observed in various experiments, and affords sufficient encouragement to proceed with a trial in more severe cases of nervous malady than have passed through Dr. Gibb's hands.

Its effects on the mucous membrane of the eye were tested in treating cases of strumous ophthalmia in the young. These were found to be remarkably beneficial and decided. In one instance, that of a girl aged twelve, the subject of strumous conjunctivitis and corneitis, with leucoma and other opacities, accompanied by great intolerance of light, which had resisted treatment, off and on, for five years, a cure resulted in five weeks under small doses of this salt; and, what was hardly expected, the opacities were actually diminishing when seen seven weeks afterwards.

The bromide of ammonium possesses some absorbing influence upon atheroma, fat, and allied compounds. Individuals who took it in quantities ranging from two to ten grains thrice a day were either in a state of moderate corpulency, or possessed the atheromatous expression. The former, whilst the general health continued unimpaired or improved further under its influence, seemed to get thinner, their adipose development became decidedly less, the secretion from the oily sudoriferous glands was much modified and diminished, and altogether there was an improved appearance in the countenance, which the persons themselves were quite aware of. This was not less marked in those undergoing atheromatous changes, and there was seen in them besides a decided clearness of the eye; the face was brighter, the integument not being so greasy; the mind seemed more active, and the bodily energy was greater.

We shall return to the subject; but we may observe that the remedy must be used pure. That prepared for Dr. Gibb was made by Fincham, of Baker-street.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, DECEMBER 3RD, 1862.

DR. TYLER SMITH, PRESIDENT, IN THE CHAIR.

THE following gentlemen were duly elected Fellows of the Society:—Dr. Charles Campbell, Kingston, Jamaica; Mr. Walter Chapman, Lower Tooting; Dr. E. Ellis, Fitzroy-street; Dr. J. Frain, South Shields; Dr. C. C. Hayman, Eastbourne; Dr. Kirkpatrick, Lying-in Hospital, Dublin; Mr. F. Prince, Sawston, Cambridgeshire; Mr. I. S. Shillingford, Peckham; Mr. G. F. Spry, Staff Assistant-Surgeon, Fort Gomer, Alverstoke; and Mr. T. Taylor, Birmingham.

A CASE OF MULTIPLE MEDULLARY CANCER, COMPLICATED WITH PREGNANCY.

BY THOMAS HAWKES TANNER, M.D.,

ASSISTANT-PHYSICIAN FOR THE DISEASES OF WOMEN AND CHILDREN TO KING'S COLLEGE HOSPITAL, ETC.

After making some preliminary remarks on the duty of recording even solitary examples of rare or complicated diseases, Dr. Tanner proceeded to give the following account of his patient:—He said, "On the 29th of July, 1862, I was requested by Dr. Thane, of Hart-street, Bloomsbury, to see with him Mrs. C. L——, aged thirty-nine, residing in Drury-lane. The poor woman was the wife of a very respectable working man, and was in comfortable circumstances for her station in life. She had always enjoyed remarkably good health. None of her relatives had ever suffered from cancer; but there was probably a slight family tendency to phthisis—that is to say, all her half-brother's children had died from pulmonary consumption. She had been married ten years; and was about five calendar months advanced in her third pregnancy. The first child had been born on the 12th of October, 1854. While suckling this infant pregnancy again took place, and on weaning the child at the beginning of 1856, she aborted, being three months advanced in gestation. After this accident the general health continued very good until the 2nd of May, 1861, when her child died from an attack of croup; and she was rendered so miserable by the loss that she may be said to have been neither happy nor well since. The catamenia had been quite regular until the 25th of February, 1862; but this was the last day of their appearance.

"At the commencement of the present year (1862) a small swelling, about the size of a hazel-nut, was first discovered in the abdominal walls, just to the right of the umbilicus. There was no other symptom of disease appreciable to her husband or herself at this time. The growth gave rise to no annoyance until a few weeks ago, when it commenced enlarging, and became the seat of lancinating pains. Similar swellings also then began to form in other parts.

"On the 29th July, at my first visit, I found her much reduced in flesh and strength. The appetite was good; but as she suffered much from indigestion and flatulence, she was afraid to eat, although the remedies prescribed by Dr. Thane had given great relief. The sleep at night was very disturbed. In the abdominal parietes, just to the right of the umbilicus, there was a well-defined tumour, about the size of a large walnut. Adjoining the lower part of the ensiform cartilage of the sternum there was a more extensive mass, also seated in the abdominal wall. In the left groin there was likewise a flattened growth, about two inches and a half in diameter. On examining per vaginam, a very firm growth was discovered projecting into the canal, feeling as if it had its origin from the lower part of the sacrum, though in reality it was entirely seated in the recto-vaginal septum. It was clear that this mass would soon block up the vagina, and Dr. Thane assured me that it had much increased in size during the last fortnight. As before mentioned, she was five months advanced in pregnancy, and both the uterine soufflé and the fœtal heart could be plainly distinguished. The liver was much enlarged, and this enlargement, combined with the size of the uterus, occasioned a wearying feeling of distension, as well as some dyspnœa.

"Taking all the foregoing circumstances into consideration, it seemed certain that the poor woman's comfort would be increased, even if life were not prolonged, by inducing premature labour—a proceeding which did not appear contraindicated by any feeling for the child, as it was certain that a live infant could not be given birth to through the natural passages. The propriety of waiting and ultimately effecting delivery by the Cæsarean section was discussed; but such a plan of treatment was regarded as not applicable to the present instance.

"Consequently on the 30th July the membranes were punctured, and about half a pint of liquor amnii withdrawn. On the 1st August, labour pains of fair severity set in; but the os uteri was still very rigid on the following afternoon, and as the patient was getting tired and exhausted, and moreover as the mass of cancer in the recto-vaginal septum reached to within almost an inch of the pubes, it was evident that nothing could be gained by further delay. I therefore slowly tried to dilate the os uteri; and this being partially effected, the fœtus was broken up with a pair of forceps, and removed piecemeal. No difficulty was experienced with the placenta; the discharge of blood was very slight; no injury was done to the uterus or vaginal walls, and the poor woman was left tolerably comfortable.

"For some few days she continued to progress favourably; but on the 10th August a severe attack of diarrhœa set in, aphthæ formed on the tongue and gums, and for the first time in her life she became jaundiced. It would only be tedious to give an account of the way in which she daily lost ground; suffice it to say that matters gradually progressed from bad to worse until the morning of the 26th of August, when death took place from exhaustion.

"At the autopsy, fourteen hours afterwards, the body was found greatly emaciated. In the abdominal parietes, to the right of the umbilicus, there was a deposit of firm medullary cancer the size of a walnut, together with a larger growth just below the ensiform cartilage. These were separate tumours, and not infiltrations. The liver was enlarged to about three times its natural size, and studded with medullary masses, varying in size from a pea to a small orange. There was likewise several deposits of cancer in the great omentum, in the spleen, in the walls of the colon, and one large mass binding the sigmoid flexure of the colon to the tissues of the pelvis. In the pelvic cavity there was a separate deposit, extending chiefly down the recto-vaginal septum, and completely blocking up the vagina. The inguinal glands on both sides were enlarged and infiltrated with medullary cancer. The uterus, considering the time which had elapsed since delivery, was of its normal size, and healthy. At the apex of the left lung there was a small deposit of tubercle, which had undergone calcareous

degeneration, while at the same part of the right lung there were several small tubercles. The heart was healthy, but its walls were flabby. The kidneys were healthy."

The paper concluded with observations as to the different modes of treatment which might be resorted to in such a case as that detailed, together with the reasons which led to the adoption of that practised.

Reviews and Notices of Books.

The Weather-Book: a Manual of Practical Meteorology. By Rear-Admiral FITZROY. pp. 464. London: Longman and Co. 1863.

A FEW professed meteorologists and other scientific men, together with the nautical profession, may be said to have some positive and more or less accurate ideas upon the currents and undulations of the earth's atmosphere and their influence in working out well-known or particular weather changes. The rest of the world, which looks up at the sky, taps the barometer, and scans the weathercock, can be admitted to be weather-wise only in its own imagination. And to this category most of us belong. Every man knows in the morning what sort of weather it is going to be, and every man is generally deceived before the evening. His umbrella is at home when it should be upon his shoulder; and when upon his shoulder the sun comes out. So frequently does this happen, that some home-made meteorologists of great natural genius have insisted on the truth that the only way to be depended upon of insuring a fine day for a pic-nic, is for the whole party to take umbrellas with them. Be this as it may, however, the power of forecasting weather beyond a few hours has hitherto been shown to be of a most illusory character.

Admiral Fitzroy has for some time determined that we ought to, and can, improve our powers in this respect. His name is now familiar, indeed, all over our island, and to the humblest fisherman upon our coasts. Some stubborn and reckless "old salts" persist in slighting the tuition and advice which the admiral so thoughtfully offers them; but to the sense and perspicuity of the majority of our captains the "weather signals" of the admiral do not speak in vain. Improved barometers instead of "Hook's plaything," power of forecasting in lieu of hazard, and preservation of life and property in place of their destruction by shipwrecks and storms, are surely gifts of no ordinary value; and for these to some extent society is indebted to the author of the book we are now drawing attention to, though to whose worth we can do we fear but scanty justice.

Whilst everyone knows that there is an atmosphere above us, that it extends for twenty miles perhaps above our heads, and that about seven miles constitute the limit in which man can exist, every person does not readily form the idea of this air having a level horizontally like water, and invariably tending to equilibrium; that it is an aërial ocean, in fact, the fluid of which is both compressible and expansible, which water is not under ordinary circumstances. This circumambient sea is constantly in varied motion, its movements or oscillations being produced by many different circumstances — the motion of the globe itself, the great circulation incessantly caused by heat consequent upon the action of the sun, tidal atmospheric movements, electricity, &c. The action and results of these aërial oscillations are witnessed in some of the more important features of general and local climates and different kinds of weather:—

"It is certainly remarkable that until lately attention had been so much attracted to the *exceptional* occurrences of our climate—to storms, to extremes of temperature, and extraordinary falls of rain, hail, or snow; that the ordinary course of nature, the less disturbed and normal condition of atmosphere, though by far the more prevalent, had so slight a share of thought bestowed on it, so little consideration of a comprehensive kind given to its usual state, that there was no clue *apparently* to the common alternations or changes of wind and weather, and even the ablest philosophers almost derided the idea of foretelling them except on occasions of great storms. Now that we have a key to the subject, some light may be thrown, and the difficulties of darkness partly dispersed. Some perplexing questions still are unanswerable, and obstacles occur often no doubt; but they are of minor importance in a practical point of view, and do not interfere materially with what has become a daily public duty — namely, general notice of *probable* winds and weather for two days in advance around the coasts of Great Britain and Ireland, with such occasional cautionary premonitions as may diminish loss of life and destruction of property."—p. 107.

The *qualities* and *values* of the meteorologic elements essential to the scientific forecasting of weather, as described in Admiral Fitzroy's book, are—pressure or tension of air; its area, depth, and cubical contents; temperature, dryness (or moisture) of air, and its electricity; direction of wind also, with its force and "degree of purity" or of combination. Having these amounts at *various* places, more or less correlated in climate, we can obtain such important dynamic results as *relative* tensions and consequent horizontal pressures, differences of temperature, differences of humidity, and electrical differences. Along with these, of course, are associated the directions of wind currents, their forces, the amounts of interference on the surface and above, also their respective electricity. Having these in the form of a vast range of statistical facts, and working out their dynamical relation to our atmosphere at any given time or succession of times, the author seeks to prove that we may know

"What is occurring around, within a certain area of several hundred miles in diameter, in the air and clouds that may be above or passing near us; and not only so, we can tell, with even more than probability, what will be the atmospheric conditions within and at any part of such an area during the next two or three days."—p. 168.

For nearly two years the theories of Admiral Fitzroy have been applied to practice, and, we believe we may say, with very marked success.

"The first cautionary or storm-warning signals were made February, 1861; since which time similar notices have been given as occasion needed. In August, 1861, the *published* forecasts of weather were tried; and after another half-year had elapsed, for gaining experience by varied tentative arrangements, the present system was established. Twenty-two reports are now received each morning (except Sundays), and ten each afternoon, besides five from the Continent. Double forecasts (two days in advance) are published with the full tables (on which they *chiefly* depend), and are sent to eight daily papers, to one weekly, to Lloyd's, to the Admiralty, and to the Horse Guards, besides the Board of Trade."—p. 170.

Our limits totally forbid any analysis of the varied subjects connected with meteorology discussed by Admiral Fitzroy. The work has been anxiously looked for since its first announcement, and it may well anticipate a very extensive circle of readers, as being the most practical and easily-mastered treatise upon an obscure though popular theme. Of course, in so comparatively unmanageable a branch of knowledge as the one here involved, there is much room for difference of opinion, not only as regards general principles, but as relates to details. Hence we may expect to find some of the deductions of the Admiral to be not at once acceded to by all meteorologists. No one can doubt, however, the main truth of the author's argument, or the advantages which have arisen from its being carried out in practice. Admiral Fitzroy has most happily combined in himself the man of science and the public philanthropist.

The Physicians', Surgeons', and General Practitioners' Visiting List, Diary, Almanack, and Book of Engagements for 1863. Smith, Long-acre.

THIS publication still maintains its character for usefulness and completeness: it should be in the possession of every medical practitioner.

THE LANCET.

LONDON: SATURDAY, JANUARY 3, 1863.

THE Old Year is dead: Live the New! We pause, as we pass within the portals of 1863, to salute our readers with such kindly greetings, freighted with every good wish for their happiness and prosperity in the twelve months to come, as time-honoured custom has rendered sacred. We pause; and yet we rest not. The labours of the journalist know no intermission. The shrill scratch of the busy pen breaks into the Christmas Carol, and the clang of the printing-press swells the Wassail chorus. Not the less, however, does the journalist rejoice with those who rejoice; not the less does his pen, under the magic shade of the holly, become endowed with fresh vigour; not the less, thanks to the wonder-working season, does he acquire renewed energy with the flush New Year. But, while, with raised and eager foot, pausing within the portal, and bracing oneself anew to another cycle of labour, it is natural to look back upon the year which has passed, and gather from it such hopeful confidence as we may for the future.

Alas! that, in ringing out the year which has gone, we could not

> "Ring out the grief that saps the mind,
> For those that here we see no more."

BENJAMIN COLLINS BRODIE, THOMAS WAKLEY, EDWARD STANLEY, JAMES ORMISTON M'WILLIAM, RICHARD FARRE, ROBERT KNOX—Death the Reaper truly was busy with keen sickle amongst the bearded grain in the twelve months gone. The loss cast a shadow over our Christmas cheer and wassail, saddening but not extinguishing them. We grieve for the dead; but (let it be confessed) such is our pride in them, that we have come to wear our grief bravely. We were loath to lose them; we have not forgotten the aching void caused by their absence; but yet, with the sad inconsistency of regret, we rejoice in their memory — a memory pregnant with all that is most honourable in, and which redounds most to the honour of, the profession.

Other causes have also contributed to sadden the mirth of this joyous season. The misery existing among the cotton-workers of Lancashire, and the doubt lest pestilence should succeed famine, could not be forgotten at a time when good-will and hospitality are in the ascendant. Nobly have the cotton-workers borne their suffering; nobly has England done her duty towards them.

Equally impossible was it to forget the cause of this famine: nay, the suffering of Lancashire pales before the wretchedness which is being inflicted upon America by civil war. We can have no difficulty in picturing to ourselves the utter misery and desolation now reigning in thousands of homes in the United States.

If the lesson taught, doubtless, by the civil war in America be as fully learned by Americans as that which we ourselves were taught and learned by the catastrophe which befell our army before Sebastopol in the winter of 1854–55, the United States may yet be the gainer by the fiery trial to which they are now exposed. In how complete a manner we learned our lesson was very conspicuously manifested by an episode of the civil war now in progress.

In the beginning of 1862 it became necessary to reinforce the garrison of Canada. The need was urgent, but it occurred at a time when the passage of the Atlantic was most dangerous, and when the severe Canadian winter interposed grave obstacles between the coast and the military posts it was requisite to strengthen. Notwithstanding these difficulties, however, 15,000 troops were thrown into the colony in a singularly short space of time; and so admirably and presciently had the hygienic care of this force been provided for, that from the time of its departure from England to the period of its reaching the inland stations to which it was destined, although subjected to a tempestuous voyage and all the rigors of a Canadian winter, the average amount of sick did not exceed two per cent. of the strength. The medical history of this expedition reflects the highest honour on the Army Medical Department and its distinguished head.

This episode of the American civil war is but one of many illustrations which might be cited to show how fully the Army authorities are alive to the necessity of a just medical and sanitary government of the troops, and how excellently the practical consequences of the Crimean war, in respect of the health-efficiency of our soldiers, are being developed. The Admiralty, moreover, is showing a disposition not to lag behind the Horse Guards and War Department in medical and sanitary matters. The health of the Royal Navy has long been in advance of that of the Army, but still there was much to be desired in the former. This was frankly admitted in Parliament by the Secretary to the Admiralty in the course of the past session. He admitted also that one of the chief insanitary drawbacks to which the sailor was exposed was the insufficient ventilation of the between-decks of our ships-of-war. Measures are now being actively taken to determine the best method of diminishing the particular evil referred to. The evil will, perhaps, be more seriously experienced in armour-clad vessels than in ships-of-war of the ordinary construction. This fact does not appear to have met with that attention from the Admiralty which it merits. At first we were disposed to animadvert upon the Circumlocution and Red-tapeism which appeared to be at the bottom of this serious neglect, but in pure shame we are compelled to forbear. How can we conscientiously exclaim against Circumlocution and Red-tapeism in an ancient Government department which inherits, and to some extent, probably, is influenced unconsciously by, these faults, when we find the same faults in a more rampant form in so adolescent and immature a creation as the Medical Council? Most dearly has the profession paid for its legislative whistle. It may be that instrument is a good one when the players know in what manner to pipe upon it; but at present the performance is excruciating to the feelings, and the listeners are apt to condemn the instrument as well as the performers.

What can be more lamentable than the aspect of the Medical Council aping the most effete bureaucracy! The proceedings of the last session of the Council again sank that body several degrees in the estimation of those without whose esteem it will soon become a nonentity. How strange the picture of this session!—The most cherished and approved resolutions of the Council set at naught by the College of Surgeons, and the Council placidly submitting to the indecent mutiny. Yet

while swallowing this huge and most offensive indignity, the Council strains at a diminutive and inoffensive *grain;* and not until the aid of the bulk of the profession is brought to bear upon the matter can it succeed in gulping (and then most ignominiously) the little particle. And then, alas! how often, when suffering throes as of a mountain in labour, has it brought forth an obnoxious little mouse! Witness the suggested amendments to the 40th clause of the Medical Act. Of a truth we begin to dread the appearance of the British Pharmacopœia. What if its publication should be proceeded with in the same benighted fashion as the Register? What— But why conjure up visions of horror! It is best, however, to steel ourselves for the worst.

Let us turn to another and pleasanter spectacle. While the Medical Council has been indulging in Circumlocutory lunes, the Royal College of Physicians has been steadily reforming itself, and advancing the true interests of the profession. The reforms of the College of Physicians culminated in the past year by the disruption of the injurious custom of re electing the President over an indefinite period, and by the recognition of Surgery as a subject of study for the Licentiates. Dr. WATSON became President in the place of Dr. MAYO.

But, after all, however much the collective action of the Medical Council may be open to objection, the individual members do not give way to fantastic vagaries such as not the least noteworthy of the members of the Bar think fit at times to indulge in. The Bar eagerly sought to make large capital out of the shortcomings of Physic in the past year. The portentous WINDHAM case led to an exhibition of forensic display at the expense of the medical profession by no means pleasant to recall, and induced Parliament, under the instigation of the Lord Chancellor, to pass an Act for the better regulation of lunacy inquiries. This Act, as first drawn up, was specifically aimed against the admission of medical evidence, in the fullest acceptation of the term, in cases of lunacy. It was largely based on the assumptions that the main difficulty in these cases was caused by the irreconcilable testimony given by opposing medical witnesses, and that insanity, as presented in a court of law, was not a question of *disease*, but of "*fact;*" not, indeed, a medical question at all. The Houses of Parliament rejected the provisions of the Lord Chancellor's Bill framed upon these assumptions, but gave force to the Bill in so far as it placed certain restrictions on medical evidence, and transferred the hearing of lunacy investigations from the Masters in Lunacy to one of the Judges of the realm. Lord BROUGHAM has justly characterized the restrictions on medical evidence as "absurd."

It is far from improbable that further vexatious legislation in lunacy may, in the approaching session of Parliament, arise out of the recent case of HALL *v.* SEMPLE. The temptation to meddle will be great for those legislators who entirely ignore the medical aspects of lunacy. It would be well for these gentlemen to bear in mind, that the doctrine of the liberty of the subject becomes a cruel farce when it is tortured into a guise which debars the nascent lunatic from securing that aid and control by which alone he may hope for mental salvation.

It is not to be denied that there was much to justify the Lord Chancellor's contemptuous remarks on medical evidence in the parliamentary discussions on the Lunacy Regulation Bill, although in the case which gave rise to the Bill, Medicine was more sinned against than sinning. It is a painful fact that in several cases of alleged malapraxis which have been tried, the medical evidence in support of the charge was scandalously insufficient, and could only have been prompted by ignorance, cupidity, or love of notoriety. Would that there were a moral gibbet for the men who thus prostitute the fame of a noble calling! Happily such men are rare.

It would be idle to attempt to show to what extent Medicine profited in 1862. We are still blinded by the spray cast off by the surf of the heaving tide. We know that there has been no rest, no quiet, and that all has tended onwards. Even the anger and discontent provoked by internal feuds, petty bickerings, individual failings, and corporate shortcomings, are but indications of that constant aspiration towards a higher ideal of Medicine, to the attainment of which such things are stumblingblocks. So far as English Medicine may be gauged by the International Exhibition—the crowning event of the year—we may feel confident that its rate of progress does not lag behind that of other nations; and in its mechanical appliances it may, indeed, claim some advantages. The reports in this journal on the surgical and medical objects exhibited have been elaborately complete, and are formally recognised in the official report of the Jury, as affording an able and necessary supplement to their labours.

For our own part, we may point with just pride to such work as we have done in the twelve months past to foster medical science and the true interests of the profession. Never did the annual volumes of THE LANCET present a richer profusion of material than in 1862. The lectures by Dr. C. J. B. WILLIAMS, Mr. HENRY LEE, Mr. HENRY THOMPSON, Dr. WM. ROBERTS, Mr. WHITE COOPER, Mr. HILTON, Dr. PEACOCK, Dr. BARNES, Dr. CHAMBERS, Dr. PAVY, Dr. BEGBIE, Mr. CRITCHETT, Dr. FULLER, Dr. PARKES, and Mr. SAVORY; the numerous original papers; the vast mine of clinical observations in the Hospital Reports; the detailed accounts of the proceedings of the different Medical Societies; our own special investigations on the Influence of Railway Travelling on Health, on New Remedies, and other subjects,—these, apart from foreign and home correspondence and news, and the free and full discussion of whatever may interest or affect the welfare of Physic, afford a mass of information which fairly keeps our readers abreast of the advances made in Medical Science and Art, and contributes in no small degree to secure such onward progress and the general well-being of the profession.

THE difficulty of drawing a line between the domains of Surgery and Medicine has always been confessedly very great. More or less, every man who professes to practise the one or the other separately and solely, is called upon to define for himself the limits of his practice; and occasionally the various interpretations which individuals have adopted, and the very wide limits which they have placed for themselves, have given rise to angry comment. Many recent differences have arisen out of this difficulty, and there is now considerable variety of opinion existing in the special domain of obstetric practice as to where the artificially bounded rights of the physician end and those of the surgeon begin. In his recently published volume of lectures, Mr. WILLIAM LAWRENCE treats this question at great length, and no one is better entitled to be heard on the subject. His years of experience, and the influence which

his counsels had in preventing the union of the Colleges of Physicians and Surgeons in giving a joint diploma for general practice, give special importance to his exposition of the case. Mr. LAWRENCE understands Surgery to include—firstly, injuries of all kinds; secondly, the greater part of external and local complaints; thirdly, such internal affections as produce changes recognisable externally—for example, alterations of figure, colour, or consistence; fourthly, all diseases requiring external topical treatment, operations, or manual proceedings of any sort. It is difficult to imagine anything pretending to be a definition which could be more imperfect and unsatisfactory than this. It is obvious that jaundice (which produces the most marked changes recognisable externally), supra-renal capsular disease, most forms of cerebral disease leading to paralysis, gout and rheumatism, and indeed nearly all the cherished subjects of the medical art, are thus brought within the sphere of the surgeon's duty; and for the rest, since there are but few of the internal disorders not producing obvious external changes which do not at some time call for such manual proceedings as leeching, cupping, bleeding, the moxa, &c., it is hard to say what diseases Mr. LAWRENCE would not consider surgical. This is, however, the inherent fault of the arbitrary distinction between Surgery and Medicine. In practice, such a difference is found highly convenient; just as in practice it is found convenient that individuals practising Surgery should devote themselves more especially to one or another class of affections—obstetric, ophthalmic, orthopædic, or cutaneous. But in the theory of disease, and in the order of nature, there is no such distinction as surgical and medical. The injuries which call for operation are modified by constitutional conditions and accompanied by internal changes which require the fullest medical knowledge. The very treatment of surgical injuries—as concussion of the brain—is most commonly purely medical in its nature; while, on the other hand, the disease which is in its origin internal and arbitrarily "medical," advances until it acquires surgical characters, and demands on the part of the physician at least the surgical information necessary to determine at what stage he shall summon the aid of the surgeon. This is seen, not only in such diseases as phlegmonous erysipelas (which forms a common ground), and furuncular and carbuncular eruptions, but in such internal diseases as pleurisy terminating in empyema, hydatids of the liver tending to the surface, intestinal obstruction suggesting the existence of solitary bands, volvulus, or intussusception. Mr. LAWRENCE, regarding the question from a surgical point of view, very fairly and justly says that to attempt to confine surgeons to operations and manual proceedings would be a degradation to which it would be impossible to submit. He instances the eye, which, with its appendages, including mucous and fibrous membranes, muscular, glandular, and nervous parts, with several peculiar tissues, is by common consent confided to the care of the surgeon. He points out that it not only exhibits the various affections produced by common disease, but it suffers gout and rheumatism, and is affected by small-pox, measles, scarlatina, and chronic cutaneous eruptions, by scrofula and syphilis, cancer, fungus hæmatodes, and melanosis. Hence Mr. LAWRENCE concludes that it is difficult to understand why there should be any distinction, grounded on the nature of the affections, between the surgeon and the physician.

This is indeed the conclusion at which many who have been called radical reformers long since arrived; and it cannot but be gratifying to them, as it is likely to aid the gradual and complete organization of the profession in this country, to find the NESTOR of Surgery and ofttimes president of the College of Surgeons, formally enunciating these opinions from his professorial chair, and publishing them as the matured results of a long life of professional experience.

The practical conclusion at which Mr. LAWRENCE arrives is yet more pointed and important: "It is in vain, then, to "establish separate professorships of external and internal "pathology; to institute distinct Colleges of Physic and Sur-"gery; to teach them as separate sciences, and to expect that "they shall be practised separately."

We are glad to claim Mr. LAWRENCE as a convert to the one-faculty system, which has long been advocated by this journal, and towards which an important progress has recently been made by the College of Physicians. It is evident that, however active may have been the opposition of certain members of the Council of the College of Surgeons to the propositions of the College of Physicians for granting a general degree,—and of these Mr. LAWRENCE has been, perhaps unjustly, reputed as among the most determined,—his avowed opinions are in favour of joint Colleges of Physic and Surgery, joint instruction in external and internal pathology, combined teaching of the two sciences, and the practice of Medicine as one art.

Medical Annotations.

"Ne quid nimis."

WILFUL IN GOOD WORK.

UPWARDS of two years ago it was proposed to the members of the Jockey Club (who assume, and have allowed to them, a sort of prescriptive control over all matters connected with the turf) that a small per-centage should be deducted from the large sums won at races, and the amount thus yearly collected given to hospitals and kindred charities. The gentleman who made this excellent suggestion offered to add a munificent donation out of his own private purse if the proposal he made might be at once carried out. When the world came to hear of, and consider, the purport of this suggestion, its exceeding propriety at first led to wonderment that it had never before been thought of. But this wonder was followed by surprise of quite another kind when it became known that the Jockey Club ignored the proposition. The public has no very intimate acquaintance with the rules by which this body shape their conduct; but it is undoubted that they had the power to carry out the charitable plan proposed by Mr. Bond if so disposed. Indeed it is almost impossible to conceive that the fortunate winner of a large stake could ever be so ill-grained and avaricious a churl as to grudge a small per-centage of his chance-gotten gains, and equally difficult is it to suppose that noblemen and gentlemen, members and rulers of the Jockey Club, could have any sympathy with a man of this kind, if such there be. Howbeit, the suggestion made by Mr. Bond was not acted on. So, after considerable waiting, he made another proposal—this time an *argumentum ad hominem*—offering, as a sort of charitable nest-egg, to give 1000 guineas if the winner of the Derby and Oaks for the current year would consent to an allocation of ten per cent. on their gains for charitable purposes. Unfortunately, this liberal offer also failed to effect a fitting response. Donation got by Emulation out of Niggardliness shied, and disappointed the hopes of many.

But Mr. Joseph Bond is not a man to be easily turned from

a good purpose; and this is how he heaps coals of fire on the heads of those who refuse sympathy with, or countenance to, his benevolent plan. His thousand guineas were ready, and, seeing how the stream of benevolence has been recently diverted from our metropolitan charities by the distress in Lancashire, he has determined to devote the sum to the same charitable uses for which it was originally intended. He has, therefore, made the following apportionment of his munificent and seasonable gift:—

To the establishment of a drinking fountain in the parish of St. Clement Danes, £316 8s. 6d.
To the Westminster Hospital, £105.
To King's College Hospital, £105.
To St. Mary's Hospital, £73 10s., (£31 10s. having been previously contributed.)
To the Cancer Hospital, £50.
To the London Hospital, £105.
To St. George's Hospital, £105.
To the Royal Free Hospital, £157 10s.

And in addition to these money donations to the hospitals, Mr. Bond presents a number of valuable works of art, to be placed either in their convalescent wards or board-rooms; the former being preferred by the donor, and wisely too. The contributions to the London, St. George's, and the Royal Free Hospitals have been transmitted through the hands of Mr. T. H. Wakley, and the donation of 150 guineas to the last-named hospital has been, in the words of the generous giver, "Presented, by Mr. Joseph Bond, to the Royal Free Hospital, as a tribute of respect to the memory of the late Mr. Thomas Wakley, Coroner for Middlesex." Two noble pictures, by Guardi and Panini, are in addition given to this last hospital; and on the frame of one of these it has been determined by the hospital committee that the above inscription shall be engraved. We may not pass without special acknowledgment such an act of seasonable and unostentatious charity, especially demanding tender recognition at our hands. Mere recital of the simple details of the gift tell little of the delicacy of the tribute; but there is scarcely a reader of THE LANCET who can fail to appreciate the motives of the generous donor.

THE FEVER CONTROVERSY.

A SOMEWHAT unpleasant and unedifying controversy has arisen between the two leading authorities on the subject of fever in this country. The questions at issue between Dr. Tweedie and Dr. Murchison are not purely scientific, but trench, in a great measure, on the ground of literary and professional morality. Both of these physicians have recently published works on fever, of which that of Dr. Tweedie anticipated Dr. Murchison's by a few weeks in its issue from the press. While the proofs of Dr. Murchison's work were being read by a professional friend, it was observed that in many passages, some of considerable length, not only the general argument, but the diction was identical with passages in Dr. Tweedie's book, these not being distinguished by quotation marks in either, but appearing in each as the original observations and deductions of the respective authors. This was pointed out to Dr. Murchison, and he referred back to his previous printed papers in the *Edinburgh Monthly Medical Journal* and "Medico-Chirurgical Transactions," where these passages are to be found printed as parts of isolated papers which he has published from time to time, containing the result of original investigation. He felt it necessary, therefore, to introduce into his preface a passage, claiming for himself their authorship, and protecting himself from the apparent fault of unavowed plagiarism. This has attracted attention, and has produced a literary *bêtue* of errors and improprieties, in which some of our medical contemporaries have distinguished themselves by more than ordinary incapacity and rashness. The unhappy organ of the British Medical Association seized eagerly the opportunity of distinguishing itself by a terrific onslaught on Dr. Tweedie. Of course that experienced physician had explanations to offer, and next week the fierce attack was followed by an abject apology. If possible the apology was more dangerous than the attack, for it is more full of errors, and this week the *Journal* must again eat humble pie. An amusing incident simultaneously complicated the question. The "management" of another periodical, learning that Dr. Tweedie had to complain of a review in its contemporary, addresses Dr. Murchison with a letter, asking for a communication on the subject, and expressing the intention of intervening in the question, and leaving the honour of both parties intact. It follows up the intention by announcing that it has learned "on the best authority" that the editor of its contemporary had never seen the long review which was inserted in the journal he is supposed to edit, and giving its own version of the affair, which is also in the highest degree inaccurate. It is not to be expected that the editor of the *Journal* will confirm the former statement as to his omission to edit his journal, although made on the best authority, and the mutual confusion, the apologies and recriminations, make up as pretty a burlesque as could be presented by actors who are well accustomed to play a part in a "Comedy of Errors."

The substantial merits of the question are quite obscured in this *bêtue* by the errors, apologies, recantations, and recriminations of those who have undertaken to arbitrate. Dr. Tweedie, on his side, avers that he has only made a perfectly justifiable use of certain MSS. voluntarily prepared by Dr. Murchison for his use, and at his suggestion, for the Lumleian Lectures delivered at the Royal College of Physicians by Dr. Tweedie, and re-written by him for THE LANCET. (See vol. i., 1860.) This position Dr. Murchison very strongly controverts, and as the question has now become one of etiquette, and even of literary morality, it is obviously desirable that it should not remain open, or be long and eagerly discussed, without an authoritative decision. Such a question may be most properly referred to arbitration. It has already been privately decided in favour of Dr. Murchison by a physician deputed by Dr. Tweedie to examine the question; but as Dr. Tweedie is far from acquiescing in that decision, it may most properly be referred for formal judgment to the Board of Censors of the College of Physicians. A good deal of evidence has been laid before us on both sides, but we decline to enter into the quarrel, or to express an opinion as to which of the two physicians is in error, if either. We trust that an official arbitration will offer a satisfactory solution of the difference.

ENDOWMENT OF MEDICAL SCHOOLS.

To the excellent examples which have recently been exhibited of endowing foundations and prizes at medical schools for the encouragement of the students, we have to add a fresh instance at Westminster Hospital. Mrs. Chadwick, the widow of a munificent benefactor of the hospital, in whose memory one of the wards had already been named, has vested £700 Consols in the lecturers of the hospital school, of which the income (£21 per annum) is to be expended in prizes for the encouragement of study. The lecturers have passed the following appropriate resolution:—

"The lecturers of the Westminster Hospital School of Medicine desire to convey to Mrs. Chadwick the expression of their deep obligation to her for the munificent endowment she has made for the purpose of promoting the education of the students of the medical school. They entertain a firm belief that the rewards offered by this endowment to industry and intelligence will afford the most efficient means for stimulating the best energies of those who are being educated at the hospital for the medical profession."

The influence of the Tite Scholarship at St. Thomas's Hospital, the Brown Scholarship at St. George's, and the Warneford endowments at King's College, has been most beneficial in each instance; and probably, if the desirability of such endowments at our medical schools were kept more openly in view, many useful additions might be made, by the munifi-

cence of other benefactors, at the various medical schools. It is worthy to be noted that while some hundred thousand pounds are annually devoted at the universities and colleges to the encouragement of classical and mathematical learning, medical colleges and schools are comparatively unendowed. Certainly, not one pound is annually given in encouragement of medical studies, for a thousand bestowed in classical and mathematical endowments. At the University of Cambridge alone twenty-six thousand pounds annually are divided among the alumni. Scarcely a hundred or two can be counted up in all the medical schools and colleges of the metropolis. Such benefactions, then, deserve to be particularly noted, when they are made; and if attention be directed to the subject, we may yet hope to see their number and total value largely increased.

THE COMPOSITION OF MILK.

IT is an old and trite but true saying, that one half the world knows not how the other half lives, or what it does; a saying which may be thus paraphrased: half the world is ignorant of that which is known to the other half. Some remarks, in a recent number of *The Times*, on the composition of milk, illustrate the truth of this position. It was therein observed—"Milk has been so often analyzed that it would seem no further facts could be elicted regarding this important fluid. Professor Boedecker, however, has just completed a series of experiments conducted on quite a new principle. The question he proposed to himself was, whether milk obtained at any hour of the day always presented the same chemical composition or not? and he has arrived at the result that the milk of the evening is richer by 3 per cent. than that of the morning, the latter containing only 10 per cent. of solid matter, and the former 13 per cent.," &c.

Now, these observations, so far from being original, though to the learned professor named above we doubt not they were so, were long since made known in the pages of this journal. In 1851 we published an elaborate report on the adulteration of milk, drawn up by Dr. Hassall, who, in connexion with the important subject of the purity of food, has achieved for himself so widespread and well-deserved a reputation; but this report was not confined to the consideration of the adulteration of milk, but entered largely, and in an original manner, into the composition of that article, the points referred to in the passage quoted above especially having been fully established. Thus it appeared that while ten samples of morning milk obtained from different cows furnished collectively 77½ per-centages of cream, the average of the whole being 7¾, the same number of samples of afternoon milk taken from the same cows gave 96½ per-centages, the average being 9¾. The curd in the first series of examples amounted to 693, and in the second to 810 grains.

But, further, at the period alluded to, the remarkable observation was also made that the composition of milk varies still more at even the same milking, the milk last drawn from the udder being always much richer than that first abstracted: thus, while eight samples of the afternoon milk first drawn furnished 81½ per-centages, the cream on those last removed amounted to no less than 141½ per-centages.

These facts are obviously of much practical importance in relation to cheese and butter making, and the diet of invalids and children. By the knowledge and right application of these facts pure milk may be procured at will, rich in cheese and sugar, but comparatively poor in cream; or rich, and even very rich, in cream, and containing less caseine and sugar. Thus the afternoon milk will be found to furnish a larger amount of cream than the morning milk, and that last drawn most of all; and hence the afternoon milk is best adapted for making butter. Again, two or three distinct qualities of cheese may be made from whole milk, richer or poorer in caseine or cream as may be desired. Lastly, the invalid may select that quality of milk which is best suited to his case and his powers of digestion. It is a common practice for invalids to procure their glass of milk direct from the cow: the milk thus obtained must, as we have seen, be of the most uncertain composition, according as it is the first or last milk drawn; if the former it will be exceedingly poor in cream, &c., and if the latter extremely rich.

The preceding particulars have also a bearing on the question of the adulteration of milk, but on this subject we shall have some remarks to offer on a future occasion.

THE SEWAGE OF THE WESTERN DIVISION OF THE METROPOLIS.

ON Tuesday evening a most influential meeting of the Metropolitan Association of the Medical Officers of Health, Dr. R. D. Thomson in the chair, was held at No. 8, Richmond-terrace, Whitehall, to receive the Report of the Committee for general purposes on the proposition of the Engineer of the Metropolitan Board of Works to discharge the sewage of the western division of the metropolis into the Thames at Cremorne. The Report was as follows:—

"The Committee appointed by the Metropolitan Association of Medical Officers of Health have anxiously considered the Report of the Engineer of the Metropolitan Board of Works, which has been submitted to them in consequence of a communication from Mr. Burge, the Medical Officer of Health for Fulham, made to the Association. They find to their surprise and regret, that although, in common with their fellow-citizens, they had understood that the whole sewage of the metropolis was to be entirely removed from the Thames within the metropolitan area, a proposal is now revived by the engineer of the Board of Works, to discharge the entire sewage of the western division of the metropolis, from Ranelagh sewer to Brentford, into the river in the neighbourhood of Cremorne Gardens. They find that the area of this district is nearly twenty-one and a half square miles, and estimate the prospective amount of the sewage at nine and a third millions of gallons daily, which is nearly equivalent to the eleventh part of the whole sewage of the metropolis.

"It appears that the district so to be dealt with is the largest of the four areas on the northern side of the river comprehended in the system of drainage now in course of being executed under the auspices of the Metropolitan Board of Works, and that the population of London is so rapidly extending in the same direction that the engineer calculated that the sewage would advance from the eighteenth part when his scheme was published to a prospective increment of one-eleventh of the whole metropolitan sewage.

"The committee understand that before pouring the contents of the western sewers into the Thames, it is proposed to retain the sewage for some time in a reservoir, occupying two acres of space, with a depth of eleven feet, and to treat it with some deodorizing agent. The preference appears to be given, principally on economical grounds, to the perchloride of iron, originally recommended by Mr. Ellerman in 1847, and reported on by a Committee of the Vestry of St. Marylebone in December of that year, as being somewhat superior to chloride of lime, chloride of zinc, and nitrate of lead, in destroying the odour of night-soil and other similar substances. But the committee are not aware that there is a single ascertained fact to warrant the conclusion that the perchloride of iron absolutely removes any deleterious ingredient from sewage, or that sewage thus merely mingled with solution of perchloride of iron, and discharged into the saline water of the Thames in summer, does not undergo the usual putrefactive decomposition to which the river has been subjected in a greater or less degree for several years. Such deodorizers appear only to act on sewage in its concentrated form. The truth of this position was demonstrated some years ago when an attempt to deodorize the contents of the main trunk sewers by means of lime ended in failure, because as soon as the sewage was diluted with the impure river water, the influence of the deodorizer terminated, and a putrefactive action was set up in the body of the stream, which was as energetic as if no disinfecting agent had been employed. The committee are therefore under the necessity of coming to the conclusion that the simple mixture of the perchloride of iron with the sewage will only operate during the brief detention of the sewage in the reservoir, and that its

use will be found expensive and fruitless so far as the removal of smell from the river is concerned.

"The committee believe that there is no difference of opinion among those who have directed their attention to the subject as to the highly putrefactive nature and unwholesome character of the mechanical impurity in sewage, and of the necessity which exists for removing all such deposit, independently of the employment of deodorizers, since it not only possesses in a strong degree capacity for decomposition, but it likewise has a tendency to communicate its own putrefactive action to other bodies with which it may come in contact. Large reservoirs, to enable the deposit to subside during a longer or shorter period, or an extensive system of filtration, would be imperatively required. But the essential accompaniments of the scheme the committee do not discover to have been contemplated in the reports of the engineer.

"The committee deem it to be the duty of the Medical Officers of Health of the Metropolis to protest against the proposed scheme of the engineer of the Metropolitan Board, because for the reasons assigned it cannot be adopted without a perpetuation of the impurity of the Thames in the midst of the metropolis, and without establishing among an increasing population at Fulham, the dangerous nuisance to health and comfort of what would be equivalent to an immense manure manufactory. (Signed),

R. DUNDAS THOMSON, M.D., F.R.S.,
Chairman of Committee."

On the motion of Mr. Liddell, medical officer of health for Whitechapel, seconded by Dr. Aldis, medical officer of health for Pimlico, the report was unanimously adopted.

After an animated discussion, in which Mr. Burge, Mr. Liddell, Dr. Aldis, Mr. Edwin Chadwick, Dr. R. D. Thomson, Mr. Rendle, Mr. Puckle, Dr. Barclay, Mr. Lord, and Mr. Whiteman took part, the following resolution was unanimously agreed to, on the motion of Mr. Burge, medical officer of health for Fulham, seconded by Dr. White Barclay, medical officer of health for Chelsea:—

"That the attention of this Association having been called to the plan proposed for the deodorization of the sewage of the western district of the metropolis, and its subsequent discharge into the Thames, wish to record their opinion that it will be ineffectual in its operation, pernicious in its influence on the river, and entirely subversive of the principles on which the intercepting scheme was originally based."

It was then agreed that a deputation of the Association should wait on the Metropolitan Board of Works to urge the necessity of their not making the western division an exception to the general scheme of the drainage of London.

The conduct of the medical officers of health fully entitles them to the commendation of the public.

THE LATE DR. ROBERT KNOX.

ON the 20th December, 1862, Dr. Robert Knox died from apoplexy, at Hackney, after an illness of ten days' duration. He attended to his duties at the Cancer Hospital on Tuesday, 9th December, but on reaching home in the evening was much exhausted. Three days afterwards he had a fit, and then the right side of his body remained paralysed. His death was a shock to those friends and acquaintances who had seen him in tolerable health two or three weeks previously; but it was and is more especially felt by his few relatives and associates, who loved the old man for his most affectionate and cheerful disposition, for his promptitude in doing any kind action which could serve another, and for his high intellectual qualities. Like all of us, he had his faults; but, as with most earnest men, these faults were superficial, and it is no abuse of language to say that a better-hearted man never existed.

Dr. Knox was born in Edinburgh on the 4th September, 1793. He was the son of Robert Knox, teacher of mathematics in the university of that city; and, with some pardonable pride, he claimed descent from the ancient and honourable Scottish family of Ranfurly, in the county of Renfrew. Of this family the celebrated reformer John Knox was a member; and, if history speak true, there were not a few points of strong resemblance between the subject of this notice and his ancestor.

The early education of Dr. Knox was received at the Edinburgh High School, then, as now, the most celebrated academy in the north. For a long time he was the dux or captain; a position he retained with comparative ease to himself, though numerous were the attempts made by youthful competitors to displace him. He was the gold-medalist in 1810; and his name still adds lustre to the tablet on which is recorded the list of the annual recipients of this honour. On leaving the High School, he studied medicine in the University of Edinburgh; and, after taking the degree of Doctor of Medicine in 1814, was appointed staff assistant-surgeon to the 72nd Regiment. He was in Brussels at the time of the Battle of Waterloo, and brought home many of our soldiers who were wounded in the fight; while subsequently he did duty at the Cape, and saw much service during the first Kaffir war in 1819-22. On leaving the army he returned to Edinburgh, and in 1825 entered into partnership with Dr. Barclay, a lecturer on anatomy and physiology, and one of the most celebrated of the extra-academical teachers. In the same year he became a Fellow of the Royal College of Surgeons of Edinburgh; and it may be mentioned here that he was subsequently made a Fellow of the Royal Society of Edinburgh, a corresponding member of the Imperial Academy of France, and a member of many less important institutions. He was married in 1832, and had six children; of whom, however, only one survives.

Soon after entering upon his partnership with Dr. Barclay, this gentleman retired; and then commenced the period of Dr. Knox's greatest popularity as an anatomist and teacher, extending nearly to the year 1844. His benches were crowded, the audience consisting of between four and five hundred ardent and energetic youths. Sprinkled, however, amongst these might, at a later period, be seen several time-worn practitioners, who had ridden into Edinburgh from some twenty, thirty, or even forty miles' distance to hear their accomplished friend. With such a class it can easily be understood that he educated between five and six thousand pupils, and that amongst these were necessarily many men destined to occupy a prominent position in the scientific world. With a happy spice of vanity he would boast of having taught William Fergusson, Richard Owen, John Reid, John Hughes Bennett, John Goodsir, James Y. Simpson, W. B. Carpenter, J. H. Balfour, Edward Forbes, the late Director-General (Mr. Alexander), and many more. The first-named gentleman was his demonstrator and special friend for many years; and often did he foretell that William Fergusson was destined to become the first surgeon of his day. In later years he plumed himself upon this piece of successful prognostication: and we believe it may be said to the honour of both these men, that neither in the tide of success nor in the reflux of trouble was their mutual friendship ever interrupted. The secret of Dr. Knox's success as a teacher is to be found in these facts—viz., that he made himself an authority upon the subject of his lectures by his dissections and writings, that he showed his heart and intellect were both entirely in his work, and that he thought more of serving his class than of making money. Indeed, with regard to this world's goods, he never had much cause to be particularly grateful; but then, as he despised shams, priestcraft, and false philosophy, so he had not the smallest love for what we are told is the root of all evil. Only a few weeks ago he said with energy, in the office of his friend and publisher, Mr. Renshaw—"I would rather discover one fact in science, than have a fortune bestowed upon me;" and his hearers knew that he spoke the truth. With regard to personal appearance too, he was indebted as little to nature as his purse owed to fortune. But he was a man, not to look at, but to converse with; though no mere clothes-horse, such were his gifts of speech, that his harmonious voice and earnest manner won the close attention of each listener. Moreover, there was scarcely a subject which could come up in conversation, but what the doctor had much to say upon it that was worth attending to. With strong prejudices, he could of course be violent in argument, though mild in manner; but his words always bore thinking of, and not uncommonly the more they were thought of the more was the speaker admired. He resembled Samuel Taylor Coleridge, not only in the tendency of his mind to metaphysical speculation, but more worthily in the vast variety of his miscellaneous knowledge, and in his great power as a talker.

In the year 1845 Dr. Knox left his native city, and came to London. He soon attached himself to the Royal Free Hospital, and was appointed pathologist to the Cancer Hospital, an institution in the welfare of which he took great interest, and which owes its museum to his untiring industry. At the same time he occasionally visited (though not of late years), Liverpool, Manchester, Newcastle, and other large cities, and delivered lectures on the Races of Men, Artistic Anatomy, &c.

The titles and the number of Dr. Knox's contributions to scientific journals, and to the Transactions of various Societies, are unknown. He seems to have kept no copies of his papers, and all that can be said is that there is scarcely a natural-history journal of any repute which does not contain one or more essays from his pen. One communication, on the "Affinities of the Trout and Salmon," is well known, and highly appreciated. He translated several works from the French: the chief being Cloquet's Anatomy, which was long used in Edinburgh as the text-book; Béclard's General Anatomy; Fau's Anatomy; and Milne-Edwards' Manual of Zoology. Then his original works would form a small library, for we find him giving to the world—"The Anatomist's Instructor;" "A series of anatomical engravings, with letter-press descriptions;" "A Manual of Human Anatomy;" "On Man, his Structure and Physiology;" "Great Artists and Great Anatomists;" "A Manual of Artistic Anatomy for the use of Sculptors, Painters, and Amateurs;" "Fish and Fishing in the Lone Glens of Scotland;" and lastly, his great work, by which he will live—"The Races of Men." Discontented with the prospect of any approach to idleness, he contemplated publishing a comprehensive work in two volumes with the title—"Contributions to the Scientific and Educational History of my Times." From a glimpse of the author's plan as detailed in the preface, which we have had the privilege of reading, we feel that the public has lost an interesting and valuable treatise.

We have said that Dr. Knox will best be remembered by his work on the "Races of Men," which has been largely read, freely found fault with, and yet highly praised. His object in publishing this "Fragment," was to show that human character, individual and national, is solely traceable to the nature of that race to which the individual or nation belongs. "That race in human affairs is everything, is simply a fact, the most remarkable, the most comprehensive, which philosophy has ever announced. Race is everything: literature, science, art—in a word, civilization depends upon it." To give any idea of the way in which this hypothesis is worked out, is impossible here; but we would strongly recommend a perusal of the volume to all who admire original and ingenious speculations. Admitting that the book contains faults of style, arrangement, and sometimes of matter, yet it is certain that the strength of the argument will make many who set out with being sceptical as to the truth of Dr. Knox's proposition, end their study of its pages by becoming firm believers in it.

Correspondence.

"Audi alteram partem."

ST. THOMAS'S HOSPITAL—A NEW PHASE OF ECCENTRICITY.

To the Editor of THE LANCET.

SIR,—The information which has appeared in THE LANCET, that the treasurer, at the head of a (self-appointed?) deputation, has been opening negotiations with the view of removing the establishment from the place where it is doing its duty so satisfactorily and progressing every day in usefulness, to a plot (not of thirty, but) of seven acres, is a startling commentary on the recent proceedings of the Grand Committee.

The publication of the fact is said to have taken these gentlemen by surprise, as much as the fact itself took the public. It looks *so* like a quiet nest-egg of fresh troubles and blunders, provokingly, but most fortunately, brought to light—an ingenious device unceremoniously exploded.

In the report adopted last spring, a minimum of from thirteen to eighteen acres was fixed upon as absolutely necessary. A convenient site of that area, replete with every improvement and advantage, was by good fortune placed at their disposal, and, when put to the test of actual business, has turned out to be eminently well adapted. It has, in short, fully confirmed the sagacity and accuracy of your own description of it twelve months ago, when, after fully considering the claims of the other sites then offered, you proved that in all natural points the Surrey Gardens were superior to any other competitor. The very locality—being as peculiarly exempt from the probability of deterioration by nuisances and unhealthy factories as the Lock's Fields district is liable thereto—presents a contrast speaking strongly against removal.

In the meantime a commission, after disporting itself in a pleasant continental trip, reported that another minimum (of not less than 30 acres) must be adopted. We know how the delusion of any such vast expanse being necessary was battled for, against the whole weight of local, of public and professional opinion. We know how unwillingly its promoters retired from their false position, if indeed they can be said to have done so yet.

Without a word of explanation for taking a course contradictory of their every word and act for months past, we find them now engaged in a——well, in a curious project to squeeze the establishment, and all its appurtenances, into a space not one-fourth of their late *minimum*; there being no necessity, no possible pretext of necessity, as they are in possession of a first-rate site, double the size of that for which they are negotiating. A month ago, according to them, the place was twelve or fourteen acres too small; now it is eight or ten acres too large!

Where can be the clue to a policy too slippery to be grasped, so erratic and shifty as to evade argument and elude reason, at each new turn pronouncing condemnation on its previous manifestations? Does its key-note consist in doing everything but that which is right, and which, in the position of the institution, is dictated by integrity and prudence? Or are the parties to it determined to confirm your surmise that there is really some "tremendous job" at the bottom of these extravagances? Without pushing such conjectures into painful invidiousness, let us hope that this last evolution is a piece of coquettish diplomatizing, indulged in through a passion for round-about, instead of direct modes of action, and that it will terminate in the measure which you recommended from the first—namely, the adoption of undeniably the best site that has presented itself, now that it has been tried and found so eligible. Thus, and thus only, even though late, can the authorities earn the verdict of intelligent approval.

Serious rumours now exist that the real intention of this professed movement for Lock's Fields is to gain time for actually going in the country after all. Nay, gentlemen whose opinion is worthy of respect do not hesitate to avow their suspicion of a design to humiliate the medical officers of the hospital, by practically destroying the scientific reputation and efficiency of the school, which would be the inevitable result of taking it out of town. Such rumours and suspicions may be very painful, very offensive. But why embark in proceedings which give rise to them, and which are almost inconsistent with the supposition of respect for public opinion or sound appreciation of duty on the part of the actors?

I am, Sir, your obedient servant,

December, 1862. VIGILANS.

THE ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—The medical officers of the Army ought to feel much indebted to you for the able remarks contained in your impression of December 20th. The gentleman to whose recent rapid promotion these remarks refer is undoubtedly a very able man; but a step of this kind is so directly opposed to the usual custom and regulations of the service, that scarcely any reasons are capable of removing the feeling of injustice attending it.

I would beg to make some remarks upon the present aspect of the Medical Department in a temperate but frank manner. Perhaps I may be allowed the expression—that if the hopes of the Department went up like a rocket, under the late Mr. Alexander, they have come down like the stick subsequently. The Horse Guards soon managed to take the gloss off the Warrant, and what may be the nature of the hopes of the medical officer, now that the Government is aiming at reduction, one can hardly say. Anyone meditating entering the Department now would do well to ponder upon these things:—What are his chances of promotion? Unless some war occurs upon a large scale, the prospect is so remote that it is difficult of estimation. He goes to an Army Medical School, and is taught a large number of difficult subjects, such as were never dreamed of before. Now he is well taught, and this step is deserving of all praise. But what are the prospects held out to a really zealous and scientific officer? I have seen some such, commencing with enthusiasm, pass through a stage of lukewarmness, reach the bank of apathy, and proceed at once to put their hands in their pockets, and sit down upon it. Unless some better reasons and hopes can be offered than at present, I see no reason why their hands should not continue in their pockets!

To a thoughtful or studious man barrack life is somewhat distracting; but how many times will he require to move those ponderous medical blue-books in the course of a year? If to-

day sees him located in a barrack-room, to-morrow sees him out of it, perhaps; and each move "stirs him up from the bottom," as I have heard it expressed. How many of these said moves are unnecessary and vexatious? Again, what are his chances, if a good professional man, of finding himself at some remote out-station attending rifle practice all day long?

Of course every fresh medical officer must have made up his mind to expatriation; but what will be done for him if he returns with his health damaged by the effects of climate? He is removed, probably, from a regiment to which he has become much attached; or he may (still worse) lead a genteel starvation life upon half pay, returning to full pay to find himself "nowhere" among the men waiting for promotion.

The inquisitorial and inspectorial systems, have they not increased? Is not a system of checks, circulars, reports (confidential and otherwise)—adapted only to the most idle and worst-disposed medical officers—applied equally to the best men at every turn of their duties? What is the effect of those "confidential reports" (only a small part of which have, after all, been made public)? It is possible that a gentleman may, in the honest exercise of his judgment, run counter to the wishes of his superior, with not only the best intentions, but the very best reasons. If so, cannot the course be summarily included in the expression, "of an impracticable temper"? and fifty stabs in the dark may be given under the cover of these newly-begotten confidential reports, than which nothing could be better calculated to destroy self-reliance and replace it by supineness and toadyism.

I appeal to anyone conversant with the facts as to how far, after all the noise that has been made upon the diminution of clerk work, such is the case; and whether the medical officer is so much more "professional" in his duties than formerly. And what amount of difference in this respect does exist, how rapidly is it being cancelled!

By the recent circulars upon "jelly," a medical officer is, for certain vague and ambiguous reasons, permitted to give it to his patients, but he must furnish a report of the case "to the Director-General in transcript and full detail from the medical case-book." Whenever officials adopt a scientific theory, they have the ill-luck to discover its great importance just at a time when it no longer rests upon a secure basis. The first "jelly" circular rendered us ridiculous as a scientific body in this way.

I unhesitatingly assert that the most scientific men would be lost in the service, and the early retirement of some of the best men proves it. What amount of leave does a medical officer get compared with his combatant brethren? Under this head I would remark upon the examinations now required of assistant-surgeons before promotion. Now, abstractedly considered, the principle is quite right, but is often as unjust as the demand made upon the Hebrews of old to make bricks without straw. What means have assistant-surgeons of keeping up their professional attainments, in too many instances? The Medical School is said to be for that purpose, but the difficulty and expense of getting there prevent men from going.

The public had a perfect right, of course, to place the administration of the Department in the hands of one so facile to the Horse Guards, as opposed to the members of that profession over which he is temporally the head, as the present Director-General; but it cannot be wondered at if the medical officers deem independence of character and a sympathy more allied with the interests and difficulties of his professional subordinates as important characteristics in a Director-General. As at present, we must look to our civil brethren for the support which, under different auspices, we might have hoped for from the head of the Department.

What I would say, then, to those who are thinking of the competitive examination advertised for the 23rd of February next is—Depend upon it, you will regret having entered the Army Medical Department as it is at present constituted.

I am, Sir, yours obediently,

Dec. 1862. ONE WHO KNOWS THE DEPARTMENT.

THE BRITISH PHARMACOPŒIA.

To the Editor of THE LANCET.

SIR,—Since writing the letter which you did me the favour to insert in your journal of last week, my attention has been called to the Report of the Pharmaceutical Committee of the General Medical Council, which appeared in THE LANCET of May 24th, signed by Dr. Christison. It appears that it is proposed to bring a Bill before Parliament to make the adoption of the forthcoming work imperative; and secondly, to secure a copyright in the work, and to prevent its invasion, either wholly or partially. On the first point I maintain that it is opposed to every principle of civil liberty, dear to Englishmen, to enforce by law in what particular form drugs shall be kept and sold by the vendors. Unless such an enactment is guarded in the most careful manner, it will prove most injurious and vexatious to the chemist and druggist, and lead to endless increase of secret remedies. As to the second, it must be borne in mind that we have already paid pretty dearly for the maintenance of the Medical Council, who seem to consider the publication of a Pharmacopœia as intended for their own private benefit. Is it the intention of the Medical Council to suppress that numerous and useful class of books—Dispensatories, Annotated Pharmacopœias, &c.? or to monopolize this branch of professional literature? Hitherto, to correct the errors, to supply the deficiencies, and supplement the scanty contents of pharmacopœias by the doses and uses of drugs and preparations, a number of works were published embracing the whole of the matter supplied by the colleges as the basis for most valuable treatises. If the contemplated law should be passed, what becomes of all these? Surely there are amongst us some who will not grudge the time and trouble to defeat this hopeful project. Well might the Home Secretary wonder what they will be at when he was called upon to give the Government assistance to this clique. All that is necessary to be done to defeat the attempt is to lay the facts first before that functionary, and if he has pledged himself to the Medical Council, to carry our objections to one of the leading Conservative members of the House of Lords. The dominant idea which seems to possess the Medical Council is that the profession is to be controlled, mulcted on all occasions, and shut up to a servile dependence on themselves. No thought is ever given to protect us against irregular practice, or to benefit our status with the public.

I am, Sir, your obedient servant,

December, 1862. G.

DR. TWEEDIE AND DR. MURCHISON.

To the Editor of THE LANCET.

SIR,—In reference to certain remarks in two of your contemporaries on the recent works on Fever by Dr. Tweedie and myself respectively, permit me to state that I have deemed it due to myself to call the attention of the President and Censors' Board of the Royal College of Physicians to the exceptionable terms in which Dr. Tweedie has thought fit to attribute motives to me, and to submit the whole matter to the consideration of the Board. I am, Sir, your obedient servant,

Wimpole-street, Dec. 1862. CHARLES MURCHISON, M.D.

ALLEGED NEGLECT OF DUTY BY A MEDICAL OFFICER.

ON Tuesday, the 23rd ult., an inquiry was held by John Mainwaring, Esq., an inspector from the Poor-law Board, at the Board Room of the West Derby Workhouse, on a charge of neglect by Dr. Lodge, one of the medical officers of the Union, in reference to the death of a man named William Saxon. It appeared that Saxon visited his sister on Thursday, the 13th of November, and being taken ill was unable to return to his own home, only about a quarter of a mile distant; he was therefore provided with a bed in her room. On Monday morning, as he was no better, his sister went to the workhouse to the relieving officer, in order to procure the advice of a medical man, and an order was given her to apply to Dr. Lodge. She took the order to his house, but he was not at home. In the evening, about seven o'clock, she saw Dr. Lodge, who then had the order, and said, "Who is this William Saxon? I shall not see him to-night." She told him the case was "urgent," but he still refused to attend, and said that "all those who want parish relief must have their notes signed before nine o'clock in the morning." The man died at half past ten on Tuesday morning, having received no medical assistance. Dr. Lodge, however, called about one o'clock on that day, and finding the man dead, expressed himself willing to give a certificate of his death, which he did. The inquiry was conducted at great length, but the chief point that presented itself for notice is that the relieving officer to whom the sister of the deceased applied for the order would not in the order describe the case as "urgent," and Dr. Lodge would not act without it. It further appeared that the relieving officer had for some time ceased to describe cases as "urgent," in consequence of an understanding which he said he had come to with Dr. Lodge, as many cases had been represented as "urgent" which, in his

opinion, were not so. This understanding was however denied. In his explanation, Dr. Lodge said that "There is a general impression amongst the profession not to attach any importance to the opinion of poor patients, and in the absence of the relieving officer's statement of urgency, they exercise their own discretion as to whether they should attend or not."

The Commissioner.—Then you mean to tell me that if the friends of a patient bring you an order and tell you that the man is very bad you are not bound to go?

Dr. Lodge.—These cases are of daily occurrence, and we do not feel bound to attend to such.

The Commissioner said he would lay the case before the Poor-law Board, and their decision would be duly communicated.

We think it is to be regretted that the relieving officer did not, upon the representation of the applicant, state that the case was one of urgency. Union medical officers are bound to act upon the instructions of the Poor-law Board, but these instructions should be carried out in other quarters also. In this inquiry, which was conducted on the part of the Commissioner with much patience and impartiality, we offer no opinion. It is one fairly open to comment, and will no doubt tend to good results.

MEDICAL TRIALS.

HALIFAX COUNTY COURT.—(*Before* J. STANSFELD, Esq.)

TUESDAY, DECEMBER 10TH, 1862.

PUGH *v.* WELLSMAN.

THIS was an action brought by plaintiff, a surgeon residing at Brighouse, against the defendant, a plumber of the same place, to recover £13 17*s.* 6*d.* for medical aid and attendance from May to July last. Payment was disputed on the ground of improper treatment; the defendant, however, admitted part of the debt and paid £7 10*s.* into court. The case for the plaintiff was ably conducted by Mr. Fairless Barber, of Brighouse. During the period named, there were two illnesses the plaintiff attended defendant in the first instance, and as the case was a serious one, he consulted with Dr. Kenny. The result was that the patient recovered, and plaintiff's visits ceased on the 28th of June. It appeared, however, that the defendant went to Askern, and having there indulged too freely, was *again* attacked with the former complaint, inflammation of the bowels. The plaintiff again attended him on the 23rd of July, but relinquished his charge of the case, in consequence, as is stated, of Dr. Kenny telling the defendant that he had been wrongly treated by the plaintiff in his first attack. The result of the trial was that the defendant was ordered to pay the balance of the account in a month. It appeared in evidence that the defendant had expressed no dissatisfaction with the plaintiff until his bill had been delivered. We notice this case in consequence of the use which was made of Dr. Kenny's name by the defendant. If Dr. Kenny had really used the words which were attributed to him, why was he not called on the defence? It was clearly not the duty of the plaintiff to place him in the witness box. Mr. Barber exercised a wise discretion in resting his case on its simple merits; he would not have been justified in assuming that Dr. Kenny had animadverted on the conduct of a professional brother in so extraordinary a manner. Until Dr. Kenny gives a denial to the statement which was made, we feel it our duty to acquit him of so grave a departure from professional decorum—a course of conduct which becomes, if true, the more reprehensible from the fact of his having been originally called into consultation by the plaintiff. It is to be regretted that actions of this kind should arise under any circumstances, but much more so if they are instigated by the unguarded comments of a professional man.

LANCASHIRE DISTRESS MEDICAL FUND.

IN pursuance of the plan adopted by the Committee to invite the co-operation of their medical brethren in the distressed districts in the distribution of the funds collected, sums amounting to £90 have been directed to be placed in the hands of several practitioners in Manchester, Ashton-under Lyne, and Todmorden. At their next meeting, the Committee will be in a position to forward further sums. They look with much satisfaction to the plan adopted, feeling sure that it is the best calculated to reach much distress that would otherwise be passed by.

The following gentlemen have consented to act upon the Committee:—Dr. Barnes, Chairman; Richard Barwell, Esq.; George Critchett, Esq.; Ernest Hart, Esq.; Dr. Webster; Dr. Forbes Winslow.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 24th ult.:—

Case, William Leonard, Goole, Yorkshire.
Lindsay, James Murray, Queen's-road, Grove-lane, Camberwell.
Martin, Adam Rae, Rochester, Kent.
Peacock, Albert Louis, Huntingdon.
Swales, Peter, Helmsley, Yorkshire.
Young, Francis, Carlton-road.

CHOLERA AT JEDDO is reported to have abated.

ELECTION OF A MEDICAL CORONER FOR SHREWSBURY.—Mr. John Sides Davies, surgeon, has been elected coroner for the borough of Shrewsbury. The election is in the hands of the Town Council.

PROPORTION OF BIRTHS TO DEATHS.—In the first three quarters of the past year, the excess of births over deaths in Great Britain was 214,537, a natural increase greater by 16,063 than in the corresponding portion of 1861.

HONOURS TO MEDICAL MEN.—Statues in honour of M.M. Lapeyronie and Barthez are about to be placed at the end of the bridge that leads to the School of Medicine in Paris.

M. LOUIS PASTEUR, the eminent chemist, has been elected member of the Academy of Sciences in Paris, in place of the late M. Senarmont. M. Pasteur has recently added to our knowledge of the phenomena of fermentation by a series of elaborate researches.

THE LOUGHBOROUGH DISPENSARY, built at the cost of Miss Herrick, is now nearly completed. It contains two large rooms intended for men's sick wards, on the ground floor, as well as two similar women's wards on the upper floor, with convenient patients' waiting rooms, consulting-rooms, &c.

DEADLY RIFLE BALL.—There is in use in the Federal army a Minié ball so manufactured that when it enters the body it divides, and there is danger of a small ring of zinc being left unextracted, which is said to account for a large proportion of the wounded being attacked by erysipelas.

HALL VERSUS SEMPLE.—We understand that a fund is being raised to relieve Dr. Semple and his family from the liabilities incurred by him in the late action. The treasurers of the fund are Dr. Waller Lewis, General Post Office, London, E.C., and Dr. Forbes Winslow, 23, Cavendish-square, London, W.

EXTRAORDINARY SELF-MUTILATION.—A woman, named Jane Brickland, of York street, Camden Town, in a fit of drunkenness, deliberately chopped off her hand at the wrist. She immediately went to University College Hospital, where the arm was shortly afterwards operated on by Mr. Quain. She is in a fair way of recovery.

KING'S COLLEGE HOSPITAL.—Upon Mr. Bowman's retirement from the hospital, twelve beds were at the disposal of the committee. Six of these have been transferred to the medical side of the house, the others being retained by the surgeons, which Mr. Fergusson and Mr. Partridge, with a liberality worthy of imitation in similar institutions, have placed at the disposal of the two assistant-surgeons, Messrs. John Wood and Henry Smith.

HOSPITAL CHANGES DURING THE YEAR 1862.—The last year has witnessed many changes in the *personnel* of the medical and surgical offices of the hospitals of the metropolis, that foremost and most zealous band of workers on whose energy and ability so much of the progress of British medicine rests. An excellent principle, which we have long urged, we at last see recognised and fruitful in good: the retirement from office of those veterans of the profession who, having held for long years appointments at the hospitals, find that their many private engagements and advancing years preclude their extended attention to the onerous duties of an hospital appointment. Thus Mr. Luke has retired from the active

ities of surgeon at the London Hospital, so making a vacancy in the staff which has been filled by Mr. Hutchinson; Mr. Bowman, from King's College, his place not being filled; Dr. Budd, from the same hospital, the vacancy in the staff being filled by the appointment of Dr. Garrod. Dr. Bence Jones, Physician at St. George's, has also retired before the expiration of his term of office to enjoy the laurels of his success; and Dr. Wadham has become a member of the staff. Mr. White Cooper, Ophthalmic Surgeon at St. Mary's, has adopted the same step, and is succeeded in his office by Mr. Ernest Hart. Mr. Lee and Mr. Holmes at St. George's Hospital, Dr. Fox at University College, Mr. Lawson at Moorfields, Mr. Christopher Heath and Dr. Latham at Westminster Hospital, Mr. Hulke and Dr. Greenhow at Middlesex Hospital, Dr. Barnes at St. Thomas's Hospital,—all new names added to the staff of these institutions. Few years have been more eventful in such changes, for this list is certainly not complete; and, reviewing the roll of names of able and talented men, full of vigour and capacity, who have thus been enlisted in the hospital work of the metropolis, we feel that both the public and the profession may be congratulated on the accession of so much talent to so good a cause.

THE ANALYSIS OF WATER.—In the journal of the Chemical Society, Mr. C. Nicholson has described a rapid volumetric process so delicate as to determine the presence of ·0005 gramme of lime per litre. He employs the alcoholic soap solution, and solutions of nitrate of baryta, nitrate of silver, oxalate of ammonia, and permanganate of potash. The discovery by Dr. Parkes, of Chatham, that potash soap might be employed to make a soap solution perfectly fluid at ordinary temperatures, has removed what might have been otherwise an insuperable bar to the perfection of the analysis.

CAMBRIDGE: ADDENBROOKE'S HOSPITAL.—The Quarterly Court of the Governors of this institution was held at the hospital on Wednesday last. W. P. Hamond, Esq., presided. The committee appointed to consider the expediency of enlarging the hospital, reported that they had invited plans from Mr. D. Wyatt, Mr. A. Salvin, Mr. C. Hardwicke, and Mr. Fancett. The plans are to be sent in by the 15th of February next, and will be submitted to the next quarterly court, on the 30th of March. The report was adopted.

FEMORAL ANEURISM CONTROLLED AFTER SEVEN HOURS' DIGITAL COMPRESSION.—M. Chassaignac communicated to the Surgical Society of Paris, at the meeting of the 24th of September, the case of a patient affected with femoral aneurism, just above the ring of the adductor magnus. Digital compression was begun at noon, and the tumour was firm and still at seven in the evening, the collateral circulation having taken twelve hours to become established. The compression was exerted on two spots alternately—namely, midway between ilium and pubis, and the muscular masses a little below, the fingers being assisted by a little bag filled with lead, which latter facilitated the manipulations. As the pain was very great in the ilio-pubic region, the alternation allowed of continuous compression. The collateral circulation is now well developed, and all the arteries are felt, both in the leg and foot. The compression was carried on for twenty-four hours more, after the condensation of the tumours, in order to prevent a return of the pulsations and ensure the permanency of the cure. M. Chassaignac stated that the results of the case had been witnessed by Messrs. Curling, Syme, Taylor, and Hodgkin.

ACADEMY OF SCIENCES.—At a late sitting a communication was received from M. Hoffmann, on crysaniline, a new colouring matter extracted from aniline, itself an artificial base derived from coal tar. When aniline has been employed to produce the red called rosaniline, a large proportion of it remains undecomposed under the form of a resinous substance, which it has been found very difficult to analyze. From this compound Mr. Nicholson has extracted crysaniline, a base of a beautiful yellow colour, which M. Hoffmann describes as a fine yellow powder not unlike chromate of lead. It is scarcely soluble in water, but very much so in alcohol and ether. This compound is a well-defined organic base, which forms two series of crystallizable salts, the most characteristic of which are the nitrates, crystallizing in needles of a ruby tint. Thus aniline produces three bases—viz., crysaniline, rosaniline, and leucaniline, each differing from the other by two equivalents of hydrogen. Prince Demidoff sent the Academy a present of a copy of a pictorial archæological album of Tuscany by the pencil of M. André Durand. M. Ozanam wrote to state, in allusion to the communication sent last week by M. Persoz, jun., on the solution of silk, that the ammoniuret of copper also has the property of dissolving both cotton and silk; but that, while the former is dissolved in a very short time, it takes several hours to dissolve silk. Hence another method of determining the composition of a compound tissue of silk, cotton, and wool, the latter being quite insoluble in the ammoniuret. M. Ozanam also announced that he was engaged in endeavouring to turn the solution of silk to account by casting silk stuffs instead of weaving them, or drawing silk threads like wire instead of spinning them, &c. MM. Jolly and Musset wrote to request the Academy to annul their last communication on spontaneous generation.

HEALTH OF LONDON DURING THE WEEK ENDING SATURDAY, DECEMBER 27th.—The returns of last week for London exhibit a further decrease on the high mortality of November. In the week that ended on Saturday the number of deaths was 1292. The average number for corresponding weeks in the ten years 1852-61, with a correction for increase of population, is 1560. The deaths last week were fewer by 268 than they would have been if the average rate of mortality had ruled. The births in the week exceeded the deaths in the same period by 318. Twenty-eight cases were recorded in which small-pox was fatal. Eleven of these occurred in the small-pox hospital. Measles was fatal in 61 cases.

The births were—boys, 829; girls, 781; total, 1610.

Obituary.

DAVID EVANS, ESQ., OF BELPER.

THE death of this gentleman, which took place on the 20th of November last, is an event which requires more than a passing notice.

For the last eight or ten years, owing to the infirmities of advanced age, he had retired from the active duties of his profession, but for many years previous to that time he was known far and wide as one of the most eminent surgeons of his day. As an operative surgeon and oculist, he was surpassed by few, his operations, in many cases, being marked by great ingenuity and boldness—a boldness almost always justified by success. He tied the carotid artery three times, twice successfully. As a lithotomist and operator for hernia and cataract he was particularly successful.

One striking excellence in Mr. Evans' professional character was the tenacious perseverance he displayed in applying the resources which great natural ability and careful observation constantly suggested; and he was thus, under Providence, the means of saving life in circumstances often considered hopeless, as illustrated by the following cases:—

A case of poisoning—the patient having taken an ounce and a half of laudanum and half a pint of gin—in which he successfully emptied the stomach, on the 6th of December, 1817, by means of a large syringe attached to an œsophageal tube—on the principle of the stomach-pump—two years before the stomach-pump was invented. The case was published in the "Transactions of the Associated Apothecaries and Surgeon-Apothecaries for England and Wales," for 1823.

But the operation which caused a great sensation at the time, and extended his reputation even to foreign countries, was a case of aneurism of the arteria innominata treated successfully by ligature of the common carotid artery on the distal side of the tumour, recorded in THE LANCET of November, 1828, and in Wardrop's work on "Aneurism." It may be interesting to the profession to know that the patient on whom this operation was performed is still living at Belper, in the enjoyment of good health, after a lapse of thirty four years.

About the year 1833 he extirpated a cancerous uterus, in the case of Mrs. H—, who survived the operation thirteen months. The uterus is at present in the museum of Queen's College, Birmingham.

The unwearied attention and kindness which Mr. Evans exercised in the discharge of his professional duties, his readiness at all times to lend his aid, and the confidence he inspired in those who sought it, will be testified to by all who knew him, in every station of life. Of his general character it is more difficult to speak. Unobtrusive and retiring, and possessing an almost child-like simplicity, he was distinguished in an eminent degree by that charity which "thinketh no evil," while at the same time he was ever active in suggesting and promoting every good work. He is gone, full of years, to his rest, having entered his eighty-third year; but his memory will be long cherished, not only by his numerous family which he has left behind him, but by the many friends far and near who have long appreciated his worth.

MEDICAL VACANCIES.

Clapham General Dispensary—Resident Dispenser.
Dental Hospital of London—Six Assistant Dental Surgeons.
Grantham Union—Medical Officer for the Ropsley District.
Kent County Ophthalmic Hospital—Resident Medical Officer.
Kilmallock Union, Co. Limerick—Apothecary to the Kilfinane Dispensary.
Mohill Union, Co. Leitrim—Medical Officer, Rowan Dispensary District.
Surrey Dispensary—Two Physicians, by resignation of Dr. Whitley and Dr. Stone.

MEDICAL APPOINTMENTS.

ALEXANDER BOTHWICK, M.D., has been appointed Consulting Physician to the Crichton Royal Institute, Dumfries, vice Jas. Grieve, M.D., deceased.

GEORGE GRANVILLE BOTHWELL, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Rathmullen Dispensary District of the Milford Union, Co. Donegal, vice Walter de Burgh, L.K.Q.C.P. Ireland, deceased.

HENRY GRAVES BULL, M.D., has been elected President of the Hereford Permanent Library.

JOHN CALDWELL, M.R.C.S.E., of the *Mars*, Assist.-Surg. R.N. Dec. 31st, 1853, has been promoted to Surgeon.

ALFRED CLARKE, M.R.C.S.E., has been appointed Medical Attendant to the Gloucester Municipal Charities, vice W. M. Meyler, M.R.C.S.E., deceased.

THOMAS COGHLAN, M.D., of the *Beagle*, Assist.-Surg. R.N. Dec. 5th, 1853, has been promoted to Surgeon.

PETER CULLEN, M.R.C.S.E., Assist.-Surg. Indian Service, has been appointed Civil Surgeon of Dumoh, vice M'Dermott, resigned.

JAMES DAVIDSON, M.D., Surgeon R.N. Sept. 12th, 1848, has been appointed to the *Meeanee*.

JOHN DICKSON, M.D., has been appointed Physician to the Dumfries and Galloway Royal Infirmary, vice Dr. J. Grieve, deceased.

C. M. DUFF, M.D., Surgeon Madras Service, Acting Surgeon 3rd District, has been appointed Surgeon of that District, vice Maclean.

JOHN EDMUNDS, M.R.C.S.E., has been appointed Surgeon to the Denbighshire Regiment of Yeomanry Cavalry.

HENRY HAMILTON, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for District No. 2 of the Bridge Union, Kent, vice H. Ussher, M.B., appointed Resident Medical Officer to the Wandsworth Dispensary.

CHRISTOPHER HEATH, F.R.C.S.E., Assistant-Surgeon to the Westminster Hospital, has been appointed Lecturer on Anatomy in the Medical School of the Westminster Hospital.

CARSTEN HOLTHOUSE, F.R.C.S.E., Surgeon to the Westminster Hospital, has been appointed Lecturer on Surgery in the Medical School of the Westminster Hospital.

JOHN HUDSON, M.R.C.S.E., of the *Cumberland*, Assist.-Surg. R.N. Dec. 5th, 1853, has been promoted to Surgeon.

CHARLES HUNTER, L.F.P.S. Glas., has been elected Medical Officer and Public Vaccinator for the Aberlemno District and the Forfar Workhouse, vice J. Edward, M.D., deceased.

WILLIAM JEYNES, M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the East Croydon District of the Croydon Union, Surrey, vice A. G. Roper, M.R.C.S.E., resigned.

JOHN WILSON JOHNSTON, M.D., Assist.-Surg. Indian Army, has been appointed Civil Surgeon of Goojrat.

W. ALEXANDER LESLIE, M.R.C.S.E., Senior 1st Class Assist.-Surg. Indian Service, has been promoted to Surgeon, vice Carnegie, deceased.

C. CLARKE LINTON, M.R.C.S.E., Deputy Inspector-General of Hospitals, Indian Service, from Mysore Division (acting in Southern Division) has been posted to the Southern Division.

W. MACKENZIE, Surgeon-Major Indian Service, has been appointed to act as Deputy Inspector-General of Hospitals during the absence in Europe of Deputy Inspector-General C. J. Smith.

MARTIN TALBOT O'KELLY, L.R.C.S.I., has been elected Medical Officer to the Workhouse of the Celbridge Union, Co. Kildare, vice Robt. H. Mowitz, L.R.C.S.I., resigned.

C. PATERSON, M.D., Acting Deputy Inspector of Hospitals, Indian Service, has been appointed Deputy Inspector-General of Hospitals, vice Graham, retired.

JOHN WM. HENRY WAYLING, M.R.C.S.E., has been elected Medical Officer for the Wavertree District of the West Derby Union, Lancashire, vice J. Kenyon, M.R.C.S.E., deceased.

FRED. POYNTON WEAVER, M.D., has been elected Medical Officer and Public Vaccinator for the Frodsham District of the Runcorn Union, Cheshire, in the place of J. Jones, M.R.C.S.E., deceased.

GEORGE IRVIN WILLES, M.R.C.S.E., Surgeon R.N. May 5th, 1854, has been appointed to the *Eymout*.

Births, Marriages, and Deaths.

BIRTHS.

On the 10th ult., at Montreal, Canada, the wife of F. W. Campbell, M.D., of a daughter.
On the 11th of Nov., at Trichinopoly, E.I., the wife of J. A. Cox, M.D., Assist.-Surg. 22nd Regt. of Light Infantry, of a son.
On the 13th ult., at Cardiff, the wife of W. Taylor, M.D., of a son.
On the 20th ult., at Mildmay-road, Stoke Newington, the wife of E. H. Olive, M.R.C.S.E., of a son.
On the 20th ult., at Mount-pleasant, Liverpool, the wife of J. Sinclair, M.D., of a son.
On the 21st ult., at St. John's, Melrose, the wife of W. Nimmo Brown, M.D., of a daughter.
On the 21st ult., at South Shields, the wife of A. Legat, M.D., of a son.
On the 22nd ult., at Upper Norwood, the wife of J. Marshall, M.D., of a son.
On the 22nd ult., at Garville-avenue, Rathgar, Dublin, the wife of E. Wm. Davy, M.B., of a son.
On the 23rd ult., at Hampstead, the wife of Dr. Dauglish, of a daughter, still-born.
On the 26th ult., at Wemyss-place, Edinburgh, the wife of John Smith, M.D., of a daughter.
On the 28th ult., at Harcourt-street, Dublin, the wife of H. Gray Croly, L.K.Q.C.P.I., of a daughter.
On the 30th ult., at Bungay, the wife of S. E. Brande, M.R.C.S.E., of a son.
On the 31st ult., at Finsbury-place, the wife of T. B. Crosby, M.D., of a son.

MARRIAGES.

On the 10th of Oct., at Richmond, Victoria, Jas. Thos. Rudall, F.R.C.S.E., to Georgiana Gordon, youngest daughter of the late Alex. Scott, Esq., of Trinity, Midlothian.
On the 6th of Nov., at St. George's Cathedral, Cape of Good Hope, Charles Burton, youngest son of J. King, Esq., late of Bellevue, Cape of Good Hope, to Dora Prendergast, eldest daughter of the late H. Birkerstead, M.D.
On the 9th of Nov., at St. George's Church, Cape Town, Cape of Good Hope, Major Thos. Peebles, 11th Regt., to E. M. H. Chiappini, daughter of P. Chiappini, M.D.
On the 20th of Nov., at Old Lakenham Church, Norwich, John Buckenham, L.R.C.P.Ed., to Mary, second daughter of E. Rosch, Esq., of Norwich.
On the 2nd ult., at Ascension, Wm. Sylvester Roche, M.B., Surgeon R.N., to Emily Minnie, daughter of Capt. G. Webb, R.M.L.I.
On the 9th ult., at St. Nicholas, Witham, W. Gimson Gimson, M.R.C.S.E., to Mary, fourth daughter of the Rev. J. B. Carwardine, M.A., Rector of St. Lawrence, Essex.
On the 14th ult., at Bellevue, Nova Scotia, Wm. Jarrett Lewis, M.R.C.S.E., Surgeon R.N., to Emma Louisa, youngest daughter of the Hon. W. A. Black.
On the 18th ult., at St. James's Church, Plymouth, Robt. Brith, M.D., Deputy Inspector-General of Hospitals and Fleets, to Jessie Douglas, only daughter of Capt. A. Smith, R.N., of Oakendean, Melrose.
On the 20th ult., at Stoke Canon, Exeter, Wm. R. Dewdney, Esq., of Stoke Canon, to Eliza, only daughter of F. Day, M.D., of the same place.
On the 23rd ult., at Jedburgh, George Fyfe, Esq., of The Nest, Jedburgh, to Marion, daughter of the late J. Millar, F.R.C.P.Ed.
On the 25th ult., at Brighton-place, Portobello, Alex. Milne, L.R.C.P.Ed., to Jane Wilson Grosvenor, only daughter of the late Charles Binny, M.D., of Arbroath.
On the 25th ult., at Walton-on-the-Hill, Edward Spencer Langley, Esq., of Tranmere, to Sarah Louisa, only daughter of the late Richard Parkinson, Surgeon, of Ratcliffe.
On the 25th ult., at St. Mark's Church, Shelton, Mr. J. A. L. Collins, to Mary Ann, youngest daughter of G. Ridgway, Surgeon, of Hanley, Staffordshire.
On the 27th ult., at St. James's, Piccadilly, E. Bucknill, M.D., only surviving son of the late E. R. R. Bucknill, Esq., to Caroline Mary, only child of T. Smith, Esq., of Grove-place, Brompton-square.
On the 30th ult., at Crickhowell, John Hotchkis, Esq., of Lanwyrk Villa, to Janet Caroline, daughter of H. J. Lucas, M.D., of Glanrafon.
On the 30th ult., at Eglington-street, Glasgow, David Haig, L.F.P.S. Glas., of Airth, to Catherine, only daughter of John Hendry, Esq.

DEATHS.

On the 5th of July, at Bron Dirion Villa, Clynnog, Carnarvon, N.W., aged 73, D. R. Pughe, Esq.; also, on Oct. 14th, at Aberdovey, Merionethshire, aged 47, Catherine Pughe; and on Nov. 22nd, at Bron Dirion aforesaid, D. W. Pughe, M.R.C.S.E.; respectively the father, wife, and only brother of John Pughe, Surgeon, J.P., Aberdovey.
On the 31st of Aug., at Shanghai, Louis Greene Lambert, M.D., aged 64.
In October, at Peshawur, S. Hope, M.R.C.S.E., Assist.-Surg. (Oct. 1st, 1849) 93rd Highlanders.
On the 12th of Nov., at Calcutta, Mary, the wife of Dr. W. Foy, aged 56.
On the 10th of Nov., at Bron Offa Ddoy Clawdd, near Wrexham, Rich. Parry Williams, L.F.P.S. Glas.
On the 21st of Nov., on Miniery Island, from the wreck of the *Colombo*, on the homeward passage from Shanghai, J. H. Rottledge, Ensign 67th Regt., only son of J. Rottledge, M.D., of George-street, Hanover-square, aged 20.
Lately, William Bell, M.D., Inspector-General of Hospitals, Army, on half-pay.
On the 13th ult., at Melton, Suffolk, Elizabeth, the wife of Dr. Kirkman, Superintendent of the Suffolk County Lunatic Asylum, daughter of the late T. Chevalier, Professor of Anatomy to the Royal College of Surgeons, and Surgeon Extraordinary to their Majesties George III. and George IV., aged 71.
On the 13th ult., Wm. Philipps Bingley, Medical Pupil at University College, aged 23.
On the 19th ult., at Crail, Fifeshire, J. W. Maillardet, late Deputy Inspector-General of Hospitals, Madras Army, aged 56.
On the 20th ult., at Alloa, Robert Watt, of Dundee, Student of Medicine in the University, and Royal College of Surgeons, Edinburgh.
On the 20th ult., Harriet, the wife of Dr. Rowney, Professor of Chemistry, Queen's College, Galway, aged 43.
On the 21st ult., at Easton, Ann Maria, widow of S. Lightfoot, M.D., aged 81.
On the 22nd ult., Peter Bossey, F.R.C.S.E., of Worthing, Sussex, aged 56.
On the 21st ult., John Barnes, L.R.C.S.Ed., of Maghull, Lancashire.
On the 24th ult., at Newland House, Gloucestershire, Jane Hamilton, relict of R. Bevan, M.D., of Monmouth, aged 77.
On the 24th ult., John Ody, M.B., of Market Harborough, Leicestershire.
On the 26th ult., at Cheltenham, Stewart Thompson, Esq., of the Madras Civil Service, youngest son of W. Thompson, M.D., of Lisburn, Co. Antrim.
On the 26th ult., Joseph Sawyers, M.D., Surgeon (Jan. 26th, 1858) 86th Regt.
On the 27th ult., at Lower Mount-street, Dublin, Margaret Theresa, the wife of J. E. Williams, L.R.C.S.I., Inspector-General Army Medical Department.
On the 28th ult., at Eckington, Jabez Harwood, M.R.C.S.E., aged 39.

QUARTERLY NAVAL OBITUARY.

John Armstrong, Surgeon Aug. 17th, 1815 (on the retired list).
James Atchison, M.D., Surgeon Aug. 2nd, 1843.
Walter John Bluett, Assistant-Surgeon Aug. 4th, 1855.
Henry G. Brock, M.D., Surgeon March 9th, 1821 (on the retired list).
James Burnside, Assistant-Surgeon Sept. 12th, 1810 (ditto).
James Guthrie, Surgeon Nov. 30th, 1800 (ditto).
Francis Robert Jago, Surgeon Sept. 27th, 1809 (ditto).
Dunbar Alexander Jemison, Assistant-Surgeon (Acting) Dec. 16th, 1861.
Alexander Montgomery, Surgeon May 5th, 1813 (on the retired list).
James Rutherford, M.D., Surgeon April 2nd, 1803 (ditto).
Archibald Stevenson, Surgeon Sept. 27th, 1801.

Medical Diary of the Week.

	Lock Hospital, Dean-street, Soho.—Clinical Demonstrations and Operations, 1 P.M.
	St. Mark's Hospital for Fistula and other Diseases of the Rectum.—Operations, 1½ P.M.
MONDAY, Jan. 5	Metropolitan Free Hospital. — Operations, 2 P.M.
	Medical Society of London. — 8½ P.M. Mr. Hancock, "On the Superiority of Chopart's Operation and Excision of the Ankle over any other Method in all Cases admitting their Performance."
	Guy's Hospital.—Operations, 1½ P.M.
	Westminster Hospital.—Operations, 2 P.M.
TUESDAY, Jan. 6	Royal Institution. — 3 P.M. Prof. Frankland, "On Air and Water." (Juvenile Lectures.)
	Pathological Society of London. — 8 P.M. General Meeting for Election of Officers.
	Middlesex Hospital.—Operations, 1 P.M.
	St. Mark's Hospital.—Operations, 1 P.M.
	University College Hospital.— Operations, 2 P.M.
WEDNESDAY, Jan. 7...	Obstetrical Society of London. — 8 P.M. Annual Meeting.—Address by the President, Dr. Tyler Smith.—Paper by Dr. Aveling, of Sheffield.
	St. George's Hospital.—Operations, 1 P.M.
	Central London Ophthalmic Hospital. — Operations, 1 P.M.
	London Hospital.—Operations, 1½ P.M.
	Royal Free Hospital.—Operations, 1½ P.M.
	Great Northern Hospital, King's Cross.— Operations, 2 P.M.
THURSDAY, Jan. 8.....	London Surgical Home.—Operations, 2 P.M.
	West London Hospital.—Operations, 2 P.M.
	Royal Orthopædic Hospital. — Operations, 2 P.M.
	Royal Institution. — 3 P.M. Prof. Frankland, "On Air and Water." (Juvenile Lectures.)
FRIDAY, Jan. 9	Westminster Ophthalmic Hospital. — Operations, 1½ P.M.
	St. Thomas's Hospital.—Operations, 1 P.M.
	St. Bartholomew's Hospital.—Operations, 1½ P.M.
SATURDAY, Jan. 10 ...	King's College Hospital.—Operations, 1½ P.M.
	Charing-cross Hospital.—Operations, 2 P.M.

To Correspondents.

A not Uncommon Case.

We have received authentic particulars of a case, which it is to be feared is not uncommon. If the example of the gentleman who was a "patient" in this instance were generally followed, such cases would become rare. The gentleman belongs to an honourable profession; he is a man of wealth and distinction. Labouring under a complaint by no means unfrequent, and susceptible of successful treatment in competent hands, he was induced in an evil hour to consult the proprietor of an "Anatomical Museum" in London. Having stated his malady to the exhibitor of the morbid specimens in the Museum, he was astonished to find himself suffering, according to the exhibitor's description of his symptoms, from a peculiar malady. After being detained three hours, he received the welcome intelligence that for twenty pounds his cure might be effected. He cheerfully gave a cheque for the amount; but he suddenly became aware of his true position by being informed, that though the remedy might be effectual, it might probably cause him the loss of all his teeth, confine him for twelve weeks to his room, and, moreover, in many ways tend materially to injure his hitherto robust constitution. But he was informed that for five hundred pounds he might receive a medicine of "no extraordinary value" which would cure him without destroying his health. Fortunately the patient had been unnecessarily alarmed, and consulted his ordinary medical attendant, a most respectable and worthy member of our profession. Acting under his advice, he wrote to the proprietor of the Anatomical Museum, stating that he was under treatment by his usual medical attendant, and should not call upon the exhibitor the next day, as he had originally contemplated. Upon this announcement, the following correspondence ensued:—

"Dear Sir,—Your note I duly received, and as I have not yet prepared your medicines our arrangement is at an end; but I trust to have the pleasure of seeing you to-morrow at twelve punctually.—Yours truly,

"——."

"22nd November, 1862.

"Sir,—I have an engagement to-morrow at twelve o'clock, which will prevent my calling on you at that hour; but as our agreement is at an end, you can from the £20 which I placed in your hands on Thursday deduct the fee due to you of one guinea, and the balance, £18 19s., you can return to me by the bearer of this note, who will give you my receipt for the same.

"(Signed) ——."

The £18 19s. was returned, and the patient is in a fair way of recovery from his complaint, without any fear of losing his teeth, being confined to his bed-room for twelve weeks, or having to pay five hundred pounds for the remedy "of no extraordinary value." The documents respecting this case are in our possession. They "point a moral," if they do not "adorn a tale."

M.D., (Edinburgh.)—1. In each branch of the service, whether cavalry, artillery, or corps of infantry, the assistant-surgeon subscribes the amount of mess subscription laid down in Her Majesty's Regulations for the Army—namely, for an officer of his rank, twelve days' pay a year, with an extra subscription for the band. There is no doubt that, with prudence and due economy, an assistant-surgeon can live on his pay, supposing his first outfit to be furnished to him.—2. No, except on the Staff, and in this case he receives lodging money, in many cases sufficient for the purpose.—3. The pay in India is over double the amount he would receive on home service.

Mr. P. L. Harper, (Brixworth.)—Mr. John Sword, Clacksaannan, Scotland, would give the desired information.

A. B. C.—He would be admitted without a letter of recommendation.

T. T.—Such is the case in America, we are sorry to say. Even a medical contemporary cannot help expressing a sort of political bitterness against England.

Lancashire Sick Kitchens.

To the Editor of The Lancet.

Sir,—The distress in Lancashire, which during the last few months has rendered the provident and improvident, the temperate and intemperate, alike dependent for subsistence on the parish or the relief fund, has been by no means an unmixed evil. The establishment of sick kitchens is undoubtedly one of the good results of the extraordinary and long-continued commercial depression with which we have been visited. Preston was, I believe, the first town in which a sick kitchen was opened; and although the funds for carrying it on have been supplied by the Relief Committee and private friends, it owes its origin to a deceased lady, who fell a martyr to her labours amongst her suffering fellow-creatures. The kitchen is a small house, for which a rent of 4s. 6d. a week is paid, and this is fitted up with an ordinary cooking range and a large boiler. A suitable cook, whose wages are 7s. 6d. a week, prepares the food for the sick during the afternoon preceding the day on which the articles are fetched away. On the production of a recommendation from a medical man, the name of the patient, his or her residence, and the diet prescribed, with the quantity ordered, are entered in a book, and a numbered ticket is given. The beef-tea or beef, &c., as the case may be, is then handed out, and at each succeeding visit the person sent for the food produces the numbered ticket. On referring to the book, it is found what articles are required, and the supply is repeated.

The advantages conferred on the suffering poor by the establishment of which I have given such an imperfect description are very great, and I sincerely hope that the Preston Sick Kitchen may become a permanent institution. In these days, when disease is considered to be treated on more rational principles than it formerly was, and the symptoms of acute illness are not at once combated by general bloodletting, mercurialization, tea, and water gruel, the importance of suitable diet for the sick is recognised by all. The sick kitchen might also, with a little management, be made a school for instructing young women in the art of cooking. As a class, the poor are sadly ignorant of cookery and domestic economy generally, and our wonder at this is diminished when we consider the way in which, in the manufacturing districts, the wives are brought up. At the age of eight years the girl begins to spend part of the day in the cotton mill, and the other part by compulsion at a school. At thirteen the whole of her day is occupied in the factory. At an early age she is married, and has to undertake the cares and responsibilities of a family, without having previously acquired the knowledge necessary to qualify her for her important position. Could not this knowledge, upon which the comfort and welfare of so many depend, be imparted at the sick kitchen, as its importance seems to be ignored at the school, where the girl receives her instruction in reading, writing, and arithmetic? By educating young women in the arts of cooking and housekeeping, I believe that intemperance would be considerably checked. And what is a more prolific source of disease than this? The poor workman on returning home from his day's toil finds his home so disagreeable, and his food so badly prepared, that he hastens to the public-house, where everything is made attractive, to arouse himself by stimulants from that depression which domestic discomforts have produced in him.

I am, Sir, your obedient servant,

Preston Dispensary, Dec. 1862. Robt. Chas. Brown, M.B. Lond.

A Sceptic.—Yes, so it is said. Pericarditis is more common in Australia than in England, and also more fatal. One death in 360 occurs from it in Melbourne, whilst in London not more than one in 532, and in all England only one in 998, is due to this cause.

Student should consult Dr. Copland's Dictionary with reference to the query he has propounded.

A Surgeon.—We are not aware of the exact mechanism of M. Maisonneuve's "diaclastic apparatus" for breaking up anchylosed joints without producing splintering or any injury to the soft parts.

J. B.—1. Such a proceeding would be irregular, but not punishable by law.—2. He should apply to some respectable instrument-maker.

B.—We will obtain the information, and forward it to our correspondent.

Arrest of Development in the Fœtus.

To the Editor of The Lancet.

Sir,—The following case, which has just occurred to myself in my practice in this town, you may perhaps consider of some interest, as showing the influence of the maternal mind upon the fœtus in utero, where a Mrs. W—— gave birth to a son, the penis being entirely absent. The child otherwise is well formed, and likely to live. The other parts of the genitals are perfect, and well developed.

The mother says that her sympathy was much excited ten months ago by gratifying a prurient curiosity to see what appearance the genitals of her brother presented after he had submitted, by my advice, to amputation of the penis, on account of carcinoma. The disease had made great progress when I was first consulted, so that it became necessary to remove the entire organ. She further states that from the time she had thus satisfied herself, her mind was unceasingly engaged with reflecting and sympathizing upon the forlorn condition of her brother. She does not confess to any fears or apprehension of evil to her expected offspring in consequence of what she had seen, but was influenced purely by sympathy with her brother. However that might have been, I have only to add that the appearances with both uncle and nephew are as similar in all respects as possibly could be.—I am, Sir, yours truly,

Margate, December, 1862. Albert P. Owen, M.R.C.S.

C. M.—It is impossible to offer an opinion on the case from the statement forwarded to us. Cases of the kind are not uncommon. The treatment must be left to the judgment of the practitioner in attendance.

THE TITLE OF DOCTOR.

To the Editor of THE LANCET.

SIR,—I contend that the dispute concerning medical titles has been brought about by the conduct of the Members of the College of Physicians themselves. They have always arrogated their superiority to the graduates of a University.

One of your correspondents of last week writes in this same presumptuous style, stating as a *fact*, that "men holding the University degree of M.D. become Members or Fellows of a College of Physicians because they consider it the highest distinction." I, however, would assign a different and I think better reason—viz., because nearly every appointment in London is closed against non-members of the College of Physicians, from which absurd regulation it happens that the best man a University ever produced is disqualified, whilst the worst Member of a College of Physicians is eligible.

A correspondent of September 13th, signing himself "Inquirer," finds fault with the rules of Bethlehem Hospital, because Doctors of Medicine of the London University and Members of the London College of Physicians seem excluded from becoming resident physician to that institution. I must confess it does appear strange that such a rule should exist, not because, as "Inquirer" states, so many of the best men in the profession are ineligible, but because they are likely to be as good as other graduates, but not any better. All these appointments should rest on the merits of the men, and not on the absurd grounds of where they obtained their degree.

Your correspondent, "Physician," states we are *only doctors, not physicians*. Why cavil then about our paltry degree? In any case, however, as a negative is incapable of proof, the suggestion of your correspondent, "L.R.C.P.E.," cannot be acted upon. I am, Sir, yours, &c.,

London, December, 1862. AN EDINBURGH GRADUATE.

To the Editor of THE LANCET.

SIR,—As the College of Physicians of London has denied my *right* to the title of Doctor, and has thereby ignored the tone and spirit of its own diploma, I shall have much pleasure to hand you on demand my cheque for two guineas towards the proposed fund for "seeking in a court of law" that justice now withheld from. Yours obediently,

December, 1862. M.R.C.P. Lond.

To the Editor of THE LANCET.

SIR,—I shall have much pleasure in contributing my guinea towards a fund for the settlement of the "Doctor's controversy."

As, however, the prefix of "Dr.," like that of "Mr.," and in common with all other titles of address below that of "Sir," is, in its right of use, dependent alone upon "analogy and ancient usage," I would propose that the matter be at once referred to the Heralds College.—I am, Sir, yours, &c.,

JAMES GAGE PARSONS, Reg. Phys.

Old Market-street, Bristol, Dec. 1862.

To the Editor of THE LANCET.

SIR,—I am happy to observe that the "physicians" have taken your most sensible advice, and have opened a fund to defray the expense of having the question of titles tried by the judges of the land. I am also happy to notice that "L.R.C.P. Lond.," Dr. Norris, and others, have departed from the high ground lately assumed by the "physicians"—viz., that they were "doctors" by *right*, and it is satisfactory, I think, to find them coming round to more defensible ground—namely, that they are "doctors" by time-honoured usage and *courtesy*. This prepares the way to an honourable compromise. Let the "physicians" hold with Dr. Norris, that to call themselves "M.D." is simply absurd and untruthful, and that they have *no legal right* to the title of "Doctor," and the M.D.s, I am sure, would in their turn frankly concede "Doctor" by *courtesy* to them. For example, J. Brown, L.R.C.P., should be addressed by *courtesy* as Dr. Brown, but never as J. Brown, M.D.

The logic of your correspondent, "J. G.," of the College of Physicians in Ireland, is perfectly outrageous. To think that because he possessed "nearly all the certificates necessary for the degree of M.D. at the University of T.C.D.," he *should* have acquired M.D. from the College of Physicians, is no ordinary flight of the imagination. His conclusion is equally rare: "As 'M.D. or Doctor E. F.' would only possess a title, he could not legally practise physic, or even write a prescription." Is it possible that we must assume this "physician" to be so ignorant as not to know that the University degree of M.D. is never given as an empty title, but with all the rights and privileges thereunto belonging. In short, a M.D. is a physician-graduate, and the other is a physician non-graduate. Your obedient servant,

December, 1862. LAMBDA, M.D.

To the Editor of THE LANCET.

SIR,—Regretting that so much of your valuable journal should be occupied with repeated articles upon this *quæstio vexata*, permit me to suggest that the physicians content themselves with the title of "*Medicinæ Doctus*," or skilled in the art of medicine, and the complaining gentlemen retain their rightful designation of "Doctores" ejusdem.

Cicero speaks of "literis doctus." Pliny speaks of "grammaticæ artis doctus." Why then should not the physicians of the present day be satisfied with the title above given?

Trusting these remarks will render any more trespasses upon your valuable pages unnecessary, I remain, Sir, yours, &c.,

December, 1862. M.D. ST. ANDREWS.

P.S.—If we "Doctores," to use the words of Tacitus, are "præstantes sapientiâ," by all means allow us the initials P.S., in order that all men may know us by such P.S. (or presents).

To the Editor of THE LANCET.

SIR,—The following opinion of Lord Chief Justice Mansfield upon the use of the title of Doctor might prove acceptable to many readers of THE LANCET at this time:—

"The provincial physician, unless thus protected by being an Extra-Licentiate of the College of Physicians, or Medical Graduate of an English University, is placed under very humiliating circumstances. He is only a *doctor by courtesy*, and therefore cannot claim rank, or defend himself in courts of law."—*Harrison's Address*, 62.

Thus, according to the learned judge, doctor is synonymous with physician; physicians (L.R.C.P.s) are something more than "*doctors by courtesy*," and can *claim rank*, and defend themselves in courts of law. In another place, Mansfield also ruled that a *Scotch* M.D. is not an *esquire*, so as to qualify his son to kill game in England, unless he be qualified to practise as a physician in England. I am, Sir, yours truly,

December, 1862. J. G. P., Doctor.

Pharmaceutist, (North.)—The proposed new substitute for quinine is ... obtained from the seeds of Apium graveolens, or the common parsley. It ... allied to a fixed oil in character, and does not contain nitrogen. It is ordered to be given in five-minim doses, suspended in a syrup or mucilaginous vehicle. Drs. Joret and Homolle are doing all they can at the Society ... Pharmacy of Paris to advocate the new agent.

Inquirer, (Newcastle-on-Tyne.)—A graduate in Medicine is one who has ... ceived a degree in Medicine at a University. There are honorary as well ... ordinary graduates.

Sigma.—He is eligible for the appointment.

Chemicus.—We presume it is not a cheap commercial article. Lithia is not ... however, used only in pharmacy, but is said to be very successfully employed ... by some of our best photographers.

J. W.—Such cases are very rare; but there is more than one on record.

Messrs. Van Abbott and Co.—The samples forwarded shall be examined and reported upon.

YEW (TAXUS BACCATA).

To the Editor of THE LANCET.

SIR,—Can any of your readers inform me whether any recent investigations have been made, chemically or therapeutically, of the properties of the common yew? Popular opinion makes yew an active poison to cattle, and a few notes may be collected from medical writers, which seem to prove that it acts on the human body as a narcotic and parturient. But our information on the subject is vague and unsatisfactory. The sweet glutinous matter surrounding the seeds renders its berries attractive to children; but the impression that the seeds themselves are poisonous makes most persons dread eating them. Has the seeds been examined for a crystalline principle? In THE LANCET of December, 1836, Mr. West reported a case of poisoning. A child, three years and a half old, died in four hours after eating the berries, with vomiting, convulsions, purple lips, and dilated pupil, probably from swallowing the seeds. Infusion of yew leaves, Dr. A. Taylor tells us, is used to procure abortion. From these and similar hints it may be inferred that the yew, carefully studied, might yield us a valuable therapeutic agent. I should be thankful for any practical information on the subject. I remain, Sir, yours truly,

December, 1862. G.

C. A.—The question is not to be solved by mere assertions. The judges of the land are the only authorities who can give a decided answer.

Hexham.—It is unusual to publish such announcements. Surely Mr. Thomas Stainthorpe could not have been previously cognizant of the extraordinary paragraph which we subjoin. It appears more probable that some injudicious friend has taken advantage of his having graduated at St. Andrews to advertise him:—

"Mr. Thomas Stainthorpe, of Hexham, L.R.C. Phys. Ed.; M.R.C.S. Eng.; and L.A.S. London, after passing the examinations holden on the 17th, 18th, and 23rd instant, by the Senatus Academicus of the University of St. Andrews, received his diploma to practise as Doctor of Medicine. Mr. Stainthorpe has a very extensive practice in the town and district of Hexham, and bears the character of being one of the cleverest, most painstaking, and active members of the profession."

F.R.C.S.—As a rule, we believe, the new offices do not object to a policyholder residing for a time in Algiers.

E. Y. P.—Not unless he be registered under the Medical Act.

A Young Surgeon.—1. There are advantages in both services.—2. To the Ambassador of either country.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Fuller; Dr. Grally Hewitt; Mr. G. E. Jeaffreson; Mr. Ager, Aylsham; Mr. Rutherford, Leeds, (with enclosure;) Dr. Gimblett, Sydney; Mr. R. Pearson, Maidstone; Mr. Ashenden, Sittingbourne, (with enclosure;) Mr. J. Williams, (with enclosure;) Mr. Simpson, (with enclosure;) Mr. Somerville, Edinburgh; Mr. S. Leyland, Hatfield, (with enclosure;) Mr. Cox, Brighton, (with enclosure;) Mr. Sadlerg Wells; Mr. H. Mackley, Wiladen, (with enclosure;) Mr. Byrn; Mr. Redfern Davies; Mr. Bangay, Saxlingham, (with enclosure;) Dr. Reid, Edinburgh; Dr. Sansom, St. Peters; Mr. J. Scott, Sandwich; Mr. Lawton, Egremont; Mr. H. W. Kiallmark, (with enclosure;) Dr. R. D. Thomson; Dr. Murchison; Messrs. S. and B. Laurence; Mr. Gorst, Prescott; Mr. D. Murray; Mr. Carnes, Coxhoe, (with enclosure;) Dr. Blanshard, (with enclosure;) Mr. Woolryeh, Ticehurst; Mr. Bilney; Dr. Pidduck; Mr. Isaacson, (with enclosure;) Dr. Davey, Northwoods; Mr. J. J. Williams, Merthyr; Dr. Hope, Tenbury, (with enclosure;) Mr. B. Williams, Wrexham; Mr. Duguid, Buckie, (with enclosure;) Mr. Hale, Flimby; Mr. Weston, Wellington; Mr. Nowell, Halifax, (with enclosure;) Mr. Wright, Tiverton; Mr. P. Richardson, Leicester; Dr. Barry, Dublin, (with enclosure;) Mr. C. Smith, Highworth, (with enclosure;) Mr. Burrows, Eckington; Mr. Gray, (with enclosure;) Dr. Maclean, Fort Pitt; Dr. Evans, Birmingham; Dr. Muller, Sydney; Mr. T. H. Smith; Dr. Mitchell, Aberdeen; Dr. Tofts, Cambridge, (with enclosure;) Mr. Harper, Brixworth; Dr. M'Nab, Bunessan; Mr. W. J. Smith; Dr. Brown; Mr. Arnison, Carlisle, (with enclosure;) Mr. W. Abery, Newcastle, (with enclosure;) Mr. Freer, Stourbridge, (with enclosure;) Mr. Dixon; Mr. Olive; Mr. Rugg; Mr. J. Stiell, New Scone, (with enclosure;) Mr. Harrison, Mansfield, (with enclosure;) Dr. Davies, Maryland; Dr. Gray, Wishaw; Mr. North, Dorking, (with enclosure;) Mr. H. Bell, Cockermouth; Mr. Winter, Pietermaritzburg; Mr. Cookson, Preston, (with enclosure;) Mr. Davis, Stafford, (with enclosure;) Mr. Ellis, Newcastle; Mr. Whitmarsh, Hounslow, (with enclosure;) Mr. Owen, Margate; Dr. Thomas, Windsor; Mr. J. D. Williams, Bala; Dr. Cocks, Dundee, (with enclosure;) Dr. Baxter, (with enclosure;) Mr. J. Deans, (with enclosure;) Dr. Parsons, Bristol; Mr. Phillips, Sheffield; Mr. Copney; Mr. Alexander; Mr. Charlton, Leeds, (with enclosure;) Mr. Lewis, Edinburgh, (with enclosure;) Mr. R. Griffin, Weymouth; Dr. Stevenson, Burwash; C. C.; K. O.; A. B.; F.R.C.S., Algiers; C. A.; J. M., (with enclosure;) Medicus, (with enclosure;) M.D.; Sufferer; W. S. A.; J. B., Belfast; Student; Beta, (with enclosure;) Argus; &c. &c.